CURRICULUM VITAE MICHAEL D. BROWN, PHD, FAHA, FACSM, FNAK

1. PERSONAL INFORMATION

Demographics

Michael David Brown Professor, School of Kinesiology College of Education Auburn University mdb0075@auburn.edu (334) 844-1982

Education

1995	Ph.D.	University of Maryland, College Park
1989	M.S.	California State University, Long Beach
1985	B.A.	California State University Long Beach

Area of Specialty

Hypertension and Exercise as a Preventive and Treatment Strategy for Hypertension in African Americans, Endothelial Cell Function.

Postdoctoral Training

1995-1998	University of Michigan School of Medicine, Department of Internal Medicine, Geriatrics Division: Age-associated Hypertension
1995-1998	University of Michigan, Institute of Gerontology: Norepinephrine Kinetics and Salt-Sensitive Hypertension

Professional Appointments

9/2017-present	Professor, School of Kinesiology, Auburn University
9/2017-present	Core Faculty, Center for Health Ecology and Equity Research, Auburn University
3/2014	Core Faculty, Institute for Minority Health Research, University of Illinois at Chicago
8/2012-2017	Professor Department of Kinesiology and Nutrition, University of Illinois at Chicago
8/2012-6/2017	Director of the Integrative Physiology-Clinical Interface Core, Collaboration, Center for Clinical and Translational Science, Department of Kinesiology and Nutrition, University of Illinois at Chicago.
6/2013-7/2014	Director of Graduate Studies Department of Kinesiology and Nutrition, University of Illinois at Chicago.

8/2006-2012	Associate Professor Department of Kinesiology, Temple University, Philadelphia, PA.
7/2007-2012	Associate Professor, Secondary Appointment Cardiovascular Research Center, Temple University School of Medicine, Philadelphia, PA.
6/2011-2012	Associate Professor, Secondary Appointment Department of Public Health, Temple University, Philadelphia, PA.
2004-2006	Associate Professor Department of Kinesiology, University of Maryland, College Park, MD.
1998-2004	Assistant Professor Department of Kinesiology, University of Maryland, College Park, MD.
1995-1998	Research Associate Department of Internal Medicine, University of Michigan Medical School, Ann Arbor, MI.
1993-1995	Research Fellow, Preventive Cardiology, University of Pittsburgh Medical School, Pittsburgh, PA.
1991-1993	Graduate Fellow Center on Aging, University of Maryland, College Park, MD.
1989-1991	Lecturer, Department of Kinesiology, California State University, San Bernardino, CA.

Professional Affiliations

American Heart Association High Blood Pressure Research Council (Fellow)

American College of Sports Medicine (Fellow)

American College of Sports Medicine Minority Health Research Interest Group

North American Artery (Fellow)

National Academy of Kinesiology (Fellow)

Honors, Awards, Recognition

1989	Graduate Honor Award, School of Applied Arts and Sciences, California State University Long Beach
1991	Graduate School Fellowship, Center on Aging, University of Maryland
1991	California State University Doctoral Scholarship
1993	National Institute on Aging, Individual National Research Service Award Predoctoral Fellowship.

1997 Trainee Investigator Award, American Federation of Medical Research, Biomedicine Meetings, Washington, DC 1999 Travel Award, Federation of American Societies for Experimental Biology Research Careers Grant Writer's Seminars and Workshops, Orlando, FL 2001 Fellow, American Heart Association Council for High Blood Pressure Research 2006 Featured in the "Impressive Scholars" section of the College of Health Professions **Annual Report** 2007 Featured in the Temple Review, Campus News Section 2008 Featured in "Focus on Research" Faculty Highlights, Temple University Research and **Graduate Studies** 2008 Fellow, American College of Sports Medicine 2011 Listing in Who's Who in America, 6th Edition 2011 (Chicago: Marquis Who's Who in America) 2011 Featured in Philadelphia Daily News Newspaper, "In Philadelphia Area, these Five African American Scientists have Found High Trajectory," February. Interviewed by WHYY radio about recent study I published in the Journal of Vascular Health and Risk Management entitled "Racial Differences in Tumor Necrosis Factor-α-Induced Endothelial Microparticle and Interleukin-6 Production" An article in the Temple Today entitled "Differences in cell response could explain higher rates of hypertension in African Americans" featured my publication in the Journal of Vascular Health and Risk Management. 2011 Appeared in the Journal of Blacks in Higher Education 2013 Fellow, University of Illinois at Chicago Honors College

2. RESEARCH, SCHOLARLY, AND CREATIVE ACTIVITIES

2014 Fellow, National Academy of Kinesiology

Articles in Refereed Journals.

MD Brown, GM Moore, MT Korytkowski, SD McCole, JM Hagberg. (1997). Improvement of insulin sensitivity by short-term exercise training in hypertensive African Americans. <u>Hypertension</u>. 30: 1549-1553. PMID: 9403581. **Impact Factor= 6.908.**

DR Dengel, RV Hogikyan, **MD Brown**, SG Glickman, MA Supiano. (1998). Insulin sensitivity is associated with blood pressure response to sodium in older hypertensives. <u>American Journal of Physiology Endocrinology Metabolism</u>. 274: E403-E409. PMID: 9530121. **Impact Factor= 4.4.**

SD McCole, **MD Brown**, GE Moore, JM Zmuda, LK Liu, J Cwynar, JM Hagberg. (1999). Cardiovascular hemodynamics with increasing exercise intensities in postmenopausal women. <u>Journal of Applied Physiology.</u> 87(6): 2334-2340. PMID: 10601186. **Impact Factor= 4.232.**

MD Brown, DR Dengel, RV Hogikyan, SG Glickman, A Galecki, M A. Supiano. (2000). Increased nitric oxide biomarkers during exercise-induced vasodilation in the forearm. International Journal Sports Med, 20: 1-7. PMID: 10727066. Impact Factor= 2.281.

N Taylor-Tolbert, DR Dengel, **MD Brown**, SD McCole, RE Pratley, RE Ferrell, JM Hagberg (2000). Ambulatory blood pressure after acute exercise in older men with essential hypertension. <u>American Journal Hypertension</u>. 13(1): 44-51. PMID: 10678270. **Impact Factor= 3.129.**

MD Brown, DR Dengel, RV Hogikyan, M A. Supiano. (2000). Sodium-sensitive hypertension is not associated with higher sympathetic nervous system activity in older hypertensive humans. <u>American Journal of Hypertension</u>. 13(4): 102-108. PMID: 10950395. **Impact Factor= 3.129.**

SD McCole, **MD Brown**, GE Moore, JM Zmuda, LK Liu, J Cwynar, JM Hagberg. (2000). Enhanced cardiovascular hemodynamics in endurance-trained postmenopausal women athletes. <u>Medicine and Science in Sports & Exercise</u>. 32(6): 1073-1079. PMID: 10862532. **Impact Factor= 4.106.**

MD Brown, SD McCole, GE. Moore, MT Korytkowski, JM Zmuda, JM Hagberg. (2000). Insulin sensitivity in postmenopausal women: independent and combined associations with hormone replacement, cardiovascular fitness, and body composition. <u>Diabetes Care</u>. 23(12): 1731-1736. PMID: 11128342.

Impact Factor= 7.14.

MD Brown, RE Ferrell, SD McCole, GE Moore, MT Korytkowski, JM Zmuda, JM Hagberg. (2001). FABP2 genotype is associated with insulin sensitivity in older women. <u>Metabolism</u>. 50(9): 1102-1105. PMID: 11555846.

Impact Factor= 2.538.

DR Dengel, **MD Brown**, RE Ferrell, MA Supiano. (2001). The role of angiotensin-converting enzyme gene in sodium sensitivity in older hypertensives. <u>American Journal of Hypertension</u>. 14(12): 1178-1184. PMID:11775123.

Impact Factor= 3.129.

MD Brown, RV Hogikyan, DR Dengel, M A. Supiano. (2002). Sympathetic nervous system activity contributes to the heterogeneous blood pressure response to exercise training in older hypertensives. <u>Journal of Applied Physiology</u>. 92:1434-1442. PMID: 11896007. **Impact Factor= 4.232.**

EP Weiss, **MD Brown**, AR Shuldiner, JM Hagberg. (2002). Fatty acid binding protein-2 gene variants and insulin resistance: gene and gene-environment interaction effects. <u>Physiological Genomics</u>. 10:145-157. PMID: 12209017. **Impact Factor= 3.368.**

JM Hagberg, SD McCole, **MD Brown**, RE Ferrell, KR Wilund, A Huberty, L Douglass, GE Moore. (2002). ACE insertion/deletion polymorphism and submaximal exercise hemodynamics in postmenopausal women. <u>Journal of Applied Physiology</u>. 92: 1083-1088. PMID: 11842043. **Impact Factor= 4.232.**

SD McCole, **MD Brown**, GE Moore, RE Ferrell, KR Wilund, JM Hagberg. (2002). Angiotensinogen M235T polymorphism associates with exercise hemodynamics in postmenopausal women. <u>Physiological Genomics</u>. 10: 63-69. PMID: 12181363. **Impact Factor= 3.368.**

DR Dengel, **MD Brown**, RE Ferrell, TH Reynolds, and MA Supiano. (2002). Exercise-induced enhancements in insulin action are associated with ACE gene polymorphisms in older hypertensives. Physiological Genomics. 11: 73-80. PMID: 12388790. **Impact Factor= 3.368.**

TH Reynolds, **MD Brown**, MA Supiano, DR Dengel. (2002). Aerobic exercise training improves insulin sensitivity independent of plasma TNF- α levels in older hypertensives. Metabolism, 51: 1402-1406. PMID: 12404188. Impact Factor= 2.538.

SJ Prior, JM Hagberg, DA Phares, **MD Brown**, L Fairfull, RE Ferrell, and SM Roth. (2003). Sequence variation in hypoxia-induced factor alpha (HIF1). <u>Physiological Genomics</u>, 15: 20-26. PMID: 12865501.

Impact Factor= 3.368.

SA Data, RE Ferrell, BD Hand, MH Roltsch, JJ Park, and **MD Brown**. (2003). Interactive effects of the eNOS gene and physical activity levels on reactive hyperemia. <u>Medicine and Science in Sports & Exercise</u>, 35:1991-1997. PMID: 14652493. **Impact Factor= 4.106.**

SD McCole, AR Shuldiner, **MD Brown**, GE Moore, RE Ferrell, KR Wilund, A Huberty, LW Douglass, and JM Hagberg. (2004). β_2 - and β_3 -adrenergic receptor polymorphisms and exercise hemodynamics in postmenopausal women. <u>Journal of Applied Physiology</u>. 96:526-530. PMID: 14715679.

Impact Factor= 4.232.

EP Weiss, JJ Park, JA McKenzie, JY Park, O Kulaputana, **MD Brown**, DA Phares, JM Hagberg. (2004) Plasma nitrate/nitrite response to an oral glucose load and the effect of endurance training. <u>Metabolism</u>. 53:673-679. PMID: 15131776. **Impact Factor= 2.538.**

CC Lee, SG Glickman, DR Dengel, **MD Brown**, and MA Supiano. (2005). Abdominal adiposity assessed by dual energy x-ray absorptiometry provides a gender-independent predictor of insulin sensitivity in older adults. <u>Journal of Gerontology</u>. 7:872-877. PMID: 16079210. **Impact Factor= 3.988.**

MH Roltsch, **MD Brown**, BD Hand, MC Kostek, DA Phares, A Huberty, LW Douglass, RE Ferrell, JM Hagberg. (2005). No association between ACE I/D polymorphism and cardiovascular hemodynamics during exercise in young women. <u>International Journal of Sports Medicine</u>. 26(8):638-644. PMID: 16158368.

Impact Factor= 2.282.

JY Park, RE Ferrell, JJ Park, JM. Hagberg, DA Phares, JM Jones, and **MD Brown**. (2005). NADPH Oxidase p22phox Gene Variants are Associated with Systemic Oxidative Stress Biomarker Responses to Exercise Training. <u>Journal of Applied Physiology</u>. 99: 1905-1911. PMID: 16002772.

Impact Factor= 4.232.

DR Dengel, **MD Brown**, TH Reynolds, and MA Supiano. (2006). Effect of aerobic exercise training on renal responses to sodium in hypertensives. <u>Medicine and Science in Sports & Exercise</u>, 38: 217-222. PMID: 16531887.

Impact Factor= 4.106.

Prior SJ, Hagberg JM, Paton CM, Douglass LW, Brown MD, McLenithan JC, Roth SM. (2006). DNA sequence variation in the promoter region of the VEGF gene impacts VEGF gene expression and maximal oxygen consumption. <u>American Journal of Physiology</u>: Heart and <u>Circulatory Physiology</u>, 290: H1848-H1855. PMID: 16339827. **Impact Factor= 3.88.**

DR Dengel, **MD Brown**, TH Reynolds, MA Kuskowski, and MA Supiano. (2006). Effect of aerobic exercise training on blood pressure sensitivity to dietary sodium in older hypertensives. <u>Journal of Human Hypertension</u>, 20: 372-378. PMID: 16484991. **Impact Factor= 2.176.**

CM Paton, **MD Brown**, FM Ivey, SM Roth, JM Hagberg. (2006). Hemostatic response to postprandial lipemia before and after exercise training. <u>Journal of Applied Physiology</u>. 101(1): 316-321. PMID: 16497841.

Impact Factor= 4.232.

JM Jones, JJ Park, JJ Johnson, D Vizcaino, BD Hand, RE Ferrell, MR Weir, TC Dowling, TO Obisesan and **MD Brown**. (2006). Renin-angiotensin system genes and exercise training-induced changes in sodium excretion in hypertensive African Americans. <u>Ethnicity and Disease</u>. 16: 666-674. PMID: 16937603.

Impact Factor=Not provided.

BD Hand, SM Roth, RE Ferrell, MH. Roltsch, M Kostek, and **MD Brown**. (2006). Association between a common AMPD1 gene variant and peripheral blood flow in females. <u>Journal of Life Sciences</u>. 79: 1413–1418. PMID: 16707139.

Impact Factor= 2.451.

JM Jones, JJ Park PhD, T Dowling, D Phares, JY Park, and **MD Brown**. (2006). Role of Potassium Excretion and Percent Body Fat on Ethnic Differences in Plasma Aldosterone Levels. <u>Ethnicity and and Disease</u>. 16(suppl 4): 10-14. PMID: 16938912. **Impact Factor=Not provided.**

BD Hand, SD McCole, **MD Brown**, JJ. Park, RE Ferrell, A Huberty, LW Douglass, and JM Hagberg. (2006). NOS3 gene polymorphism and exercise hemodynamics in postmenopausal women. <u>International Journal of Sports Medicine</u>. 27: 951-958. PMID: 16761221. **Impact Factor=2.281.**

DR Dengel, **MD Brown**, RE Ferrell, TH. Reynolds, MA Supiano. (2007). A preliminary study on the T-786C endothelial nitric oxide synthase gene and renal hemodynamics and blood pressure responses to dietary sodium. <u>Journal of Physiological Research</u>. 56:393-401. PMID: 16925467. **Impact Factor= 5.139.**

JM Jones, TC Dowling, JJ Park, DA Phares, JY Park, and **MD Brown**. (2007). Differential Aerobic Exercise-Induced Changes in Plasma Aldosterone are Dependent on Baseline Levels in Prehypertensives. <u>Experimental Physiology Translation and Integration</u>. 92.5: 871-879. PMID: 17483200.

Impact Factor=3.168.

JY Park, IKG Farrance, NM. Fenty, JM Hagberg, SM Roth, H Jo, T Okazaki, SR Brant, DM Mosser, and **MD. Brown.** (2007). NFKB1 Gene Promoter Variation Implicates Shear-Induced Endothelial Nitric Oxide Synthase Gene Expression and Endothelial Function in Pre and Stage1 Hypertensives. <u>American Journal of Physiology: Heart and Circulatory Physiology</u>. 293: H2320-H2327. PMID: 17644577.

Impact Factor=3.88.

S. Attipoe, JY Park, N Fenty, D Phares, and **MD Brown**. (2008). Oxidative Stress Levels are Reduced in Postmenopausal Women with Exercise Training Regardless of Hormone Replacement Therapy Status. <u>Journal of Women & Aging</u>. 20: 20: 31-45. PMID: 18581699. **S. Attipoe, Undergraduate Student**. **Impact Factor= .805.**

TJ Ellis, N Kume, **MD Brown**, DA Phares, RE Ferrell, JM. Hagberg. (2008). Variation in the Lectin-like Oxidized LDL Receptor 1 (LOX-1) Gene is Associated with Plasma Soluble LOX-1 Levels. <u>Experimental Physiology</u>. 93.9: 1085-1089. PMCID: PMC2652129. **Impact Factor= 3.168.**

DL Feairheller, **MD Brown**, JY Park, TE. Brinkley, S Basu, JM. Hagberg, RE. Ferrel, and N Fenty-Stewart. (2009). NADPH oxidase p22phox Gene Polymorphisms and Oxidative Stress Responses to Exercise Training in Pre and Stage 1 Hypertensives. <u>Medicine and Science in Sports & Exercise</u>. 41: 1421-1428. PMID: 19516159. Impact Factor= 4.106. KM Sturgeon, **MD Brown**, KM Diaz; TE Brinkley, TC Dowling, NM Fenty-Stewart. (2009). The Relationship of Oxidative Stress and Cholesterol with Blood Pressure Dipping Status Before and After Aerobic Exercise Training. <u>Blood Pressure</u>. 18: 171-179. PMID: 19544106. **Impact Factor= 1.455.**

NM Fenty-Stewart, JY Park, SM Roth, JM Hagberg, S Basu, RE Ferrell, and **MD Brown**. (2009). Independent and Combined Influence of *AGTR1* Gene Variants and Aerobic Exercise Training on Angiotensin II and Oxidative Stress in Hypertensive Adults. <u>Blood Pressure</u>. 18:204-212. PMID:

19593696.

Impact Factor= 1.455.

TE Brinkley, NM Fenty, JY Park, DA Phares, **MD Brown**, JM Hagberg. (2009). Plasma Nitrate/Nitrite Levels are Unchanged after Long-Term Aerobic Exercise Training in Older Adults. Nitric Oxide: Biology and Chemistry. 21: 234-238. PMID: 19825427. Impact Factor= 2.997.

Praveen Veerabhadrappa, Keith M. Diaz, Deborah L. Feairheller, Kathleen M. Sturgeon, Sheara Williamson, Deborah L. Crabbe, Abul Kashem, Debra Ahrensfield and **MD. Brown**. (2010). Enhanced Systolic Blood Pressure Variability in African Americans at High Risk for Cardiovascular Disease. <u>Journal of the American Society of Hypertension</u>. 4:197-195. PMID: 20885987.

Impact Factor= 2.835

DL Feairheller, KM Sturgeon, KM Diaz, P Veerabhadrappa, ST Williamson, DL Crabbe, and **MD Brown**. (2010). Association of Nitric Oxide, Renal Function, and hsCRP in Pre-hypertensive African American Women. <u>Kidney and Blood Pressure Research</u>. 33: 282-290. PMID: 20628261.

Impact Factor= 1.5.

Anderson Saranz Zago, Joon-Young Park, Nicola Fenty-Stewart, Eduardo Kokubun, **MD. Brown**. (2010). Effects of aerobic exercise on the blood pressure, oxidative stress and eNOS gene polymorphism in pre-hypertensive older people. <u>European Journal of Applied Physiol</u>. 110(4):825-32. PMID: 20614130.

Impact Factor= 2.214.

Kathleen M. Sturgeon, Praveen Veerabhadrappa, Keith M. Diaz, Deborah L. Feairheller, Sheara Williamson, Jan Kretschmar, Deborah L. Crabbe, Abul Kashem, Debra Ahrensfield and **MD Brown**. (2010). Clinical Risk Factors Demonstrate an Age-Dependent Relationship with Oxidative Stress Biomarkers in African Americans. <u>Ethnicity and Disease</u>. 20: 403-408. PMID: 21305829.

Impact Factor= Not provided.

Zago AS, Kokubun E, Fenty-Stewart N, Park JY, Attipoe S, Hagberg J, **MD. Brown**. (2010). Effect of physical activity and T-786C polymorphism in blood pressure and blood flow in the elderly. <u>Arquivos Brasileiros de Cardiologia</u>. 4: 510-516. PMID: 20835679. **Impact Factor= 1.32.**

Keith M. Diaz, Deborah L. Feairheller, Kathleen M. Sturgeon, Sheara Williamson, Praveen Veerabhadrappa, Deborah L. Crabbe, and **MD. Brown**. (2010). Diastolic Blood Pressure Variability is Attenuated in African Americans with Mildly Impaired Renal Function. <u>International Journal of Hypertension</u>. 2010: 1-9. PMID: 21274440.

Impact Factor= Not provided.

Deborah L. Feairheller, Keith M. Diaz, Kathleen M. Sturgeon, Sheara T. Williamson, and **Michael D. Brown**. Racial Differences in the Time-Course Oxidative Stress Responses to Acute Exercise. (2011). <u>Journal of Exercise Physiology</u>. 14: 49-59. PMCID: PMC3118095. **Impact Factor= 0.41.**

Deborah L. Feairheller, Joon-Young Park, Kathleen M. Sturgeon, Sheara T. Williamson, Keith M. Diaz, Praveen Veerabhadrappa, & **MD. Brown.** Racial differences in oxidative stress and inflammation: *in vitro* and *in vivo*. Clinical and Translational Science. 4: 32-37. PMID: 21348953.

Impact Factor=2.33

ST Williamson, **MD Brown**, S Jansen and D Varma. (2011). Eicosanoid Production Following One Bout of Exercise in African American Pre- and Stage 1 Hypertensives. <u>Journal of Aging Research</u>. doi:10.4061/2011/3028022011: 1-7. PMID: 21629748. **Impact Factor= 1.53.**

Deborah L. Feairheller, Joon-Young Park, Victor Rizzo, Boa Kim, & **Michael D. Brown**. (2011). Racial Differences in the Responses to Shear Stress in Human Umbilical Vein Endothelial Cells. <u>Journal of Vascular Health and Risk Management</u>. 7: 425-431. PMID: 21796257. **Impact Factor= 2.94.**

Veerabhadrappa P, Diaz KM, Kashem AM, Crabbe DL, Feairheller DL, Sturgeon KM, Williamson ST & **Brown MD**. (2011). Endothelial Dysfunction in Prehypertensive African Americans with Masked Hypertension. <u>American Journal of Hypertension</u>. 24: 1102-1107. PMID: 21677701.

Impact Factor= 3.129.

Diaz, K.M., Feairheller, D.L., Sturgeon, K.M., Williamson, S.T., & **Brown, M.D**. (2011). Oxidative Stress Response to Short Duration Bout of Submaximal Aerobic Exercise in Healthy Young Adults. International Journal of Exercise Science, 4: 247-256.

Impact Factor=currently being calculated

MD Brown, DL Feairheller, S Thakkar, P Veerabhadrappa JY Park. (2011) Racial Differences in Tumor Necrosis Factor-α-Induced Endothelial Microparticle and Interleukin-6 Production. <u>Journal of Vascular Health and Risk Management</u>. 7: 541-550. (Video abstract available: http://www.dovepress.com/articles.php?article_id=8160&l=4Tz7WEYDJvc5HCkVcb8UTrvy6803 6). PMID: 21966220.

Impact Factor= 2.94.

Nathan T. Jenkins, Rian Q. Landers, Sunny R. Thakkar, **Michael D. Brown**, Steven J. Prior, Espen E. Spangenburg, James M. Hagberg. (2011). Endurance Exercise Prevents Postprandial Lipemia-Induced Increases in Reactive Oxygen Species in Circulating CD31⁺ Cells. <u>Journal of Physiology</u>. 589(Pt 22):5539-53. PMID:21930598. **Impact Factor= 5.139.** Clare M. Lenhart, Alexandra Hanlon, Youjeong Kang, Brian P. Daly, **Michael D. Brown**, and Freda Patterson. (2012). Gender Disparity in Structured Physical Activity and Overall Activity Level in Adolescence: Evaluation of Youth Risk Behavior Surveillance Data. <u>Public Health</u>. 2012: 1-8.

Impact Factor= 1.605.

Keith M. Diaz, Praveen Veerabhadrappa, Mohammed Kashem, Deborah L. Feairheller, Kathleen M. Sturgeon, Sheara Williamson, Deborah L. Crabbe, and **MD. Brown**. (2012). Relationship of Visit-to-Visit and Ambulatory Blood Pressure Variability to Vascular Function in African Americans. <u>Hypertension Research</u>. 35: 55-61. PMID: 21814215. **Impact Factor= 2.56.**

Michael Brown and Deborah Feairheller. (2013). Are there Race-Dependent Endothelial Cell Responses to Exercise? <u>Exercise and Sport Science Reviews</u>. 41(1):44-54. PMID: 23262464. **Impact Factor= 4.491.**

Dianne M. Babbitt, Keith M. Diaz, Deborah L. Feairheller, Kathleen M. Sturgeon, Amanda M. Perkins, Praveen Veerabhadrappa, Sheara T. Williamson, Jan Kretzschmar, Chenyi Ling, Hojun Lee, Heather Grimm, Sunny R. Thakkar, Deborah L. Crabbe, Mohammed A. Kashem, **Michael D. Brown**. (2013). Endothelial Activation Microparticles and Inflammation Status Improve with Exercise Training in African Americans. International Journal of Hypertension. 2013:1-8. PMID: 23691280

Impact Factor= 3.806

Keith M. Diaz, Praveen Veerabhadrappa, Mohammed A. Kashem, Sunny R. Thakkar, Deborah L. Feairheller, Kathleen M. Sturgeon, Chenyi Ling, Sheara T. Williamson, Jan Kretzschmar, Hojun Lee, Xiaoxuan Fan, Deborah L. Crabbe, and **Michael D. Brown**. (2013). Visit-to-Visit and 24-H Blood Pressure Variability: Association with endothelial and Smooth Muscle Function in African Americans. <u>Hypertension Research</u>. 27: 671-677. PMID: 23615389. **Impact Factor= 2.56.**

Boa Kim, Yisang Yoon, Mayra C. Santiago, **Michael D. Brown**, Joon-Young Park. Mitochondrial fission protein Drp1 plays a crucial role in myotube differentiation by regulating mitochondria-mediated apoptosis. (2014). American <u>Journal of Physiology-Regulatory</u>, <u>Integrative</u>, and <u>Comparative Physiology</u>. 305: R927-R938. PMID: 23904108. **Impact Factor= 3.34**.

Jan Kretzschmar, Dianne M. Babbitt, Keith M. Diaz, Deborah L. Feairheller, Kathleen M. Sturgeon, Amanda M. Perkins, Praveen Veerabhadrappa, Sheara T. Williamson, Chenyi Ling, Hojun Lee, Heather Grimm, Sunny R. Thakkar, Deborah L. Crabbe, Mohammed A. Kashem, and **Michael D. Brown**. (2014). A standardized exercise intervention differentially affects premenopausal and postmenopausal African-American women. <u>Menopause</u>. 21(6): 579-584. PMID: 24193297.

Impact Factor= 3.163.

Feairheller, D.L.; Diaz, K.M.; Kashem, M.A.; Thakkar, S.R.; Veerabhadrappa, P.; Sturgeon, K.S.; Ling, C.; Williamson, S.T.; Kretzschmar, J.; Lee, H.; Grimm, H.; Babbitt, D.M.; Vin, C.; Fan, X.; Crabbe, D.L.; **Brown, M.D.** (2014). Effects of moderate aerobic exercise training on vascular health and blood pressure in African Americans. <u>Journal of Clinical Hypertension</u>. 7: 504-510. PMID: 24779748

Impact Factor= 2.364.

Prendergast HM, Dudley S, **Brown M**, Daviglus M, Kane J, Bradshaw Bunney E, Marcucci J, Sanyaolu R. (2014). Antihypertensive Medications and Diastolic Dysfunction Progression in an African American Population. <u>High Blood Press Cardiovascular Prevention</u>. 4: 269-274. PMID: 24972662. **Impact Factor= 1.16**

Chenyi Ling, Keith M. Diaz, Jan Kretzschmar, Deborah L. Feairheller, Kathleen M. Sturgeon, Amanda Perkins, Praveen Veerabhadrappa, Sheara T. Williamson, Hojun Lee, Heather Grimm, Dianne M. Babbitt, **Michael D. Brown**. (2014). Chronic Aerobic Exercise Training Improves Blood Pressure Dipping Status in African American Non-Dippers. <u>Blood Pressure Monitoring Journal</u>. 19(6): 353-358. PMID: 25100263.

Impact Factor= 1.84

Keith M Diaz, Paul Muntner, Emily B Levitan, **Michael D Brown**, Dianne M Babbitt, Daichi Shimbo. (2014). The Effect of Weight Loss and Salt Reduction on Visit-To-Visit Blood Pressure Variability among Overweight Adults: Multicenter Randomized Controlled Trial. <u>Journal of Hypertension</u>. 32(4), 840-848. PMID: 24366034. **Impact Factor= 4.021.**

Keith M. Diaz, Praveen Veerabhadrappa, **Michael D. Brown**, Matthew C. Whited, Patricia M. Dubbert, DeMarc A. Hickson. (2014). Prevalence and Clinical Significance of Masked Hypertension in a Population-Based Sample of African Americans: The Jackson Heart Study. <u>American Journal of Hypertension</u>. PMID: 25499058 **Impact Factor= 3.1.**

JS Kim, B Kim B, H Lee H, S Thakkar S, DM Babbitt, S Eguchi, **MD Brown**, JY Park. (2015) Shear stress-induced mitochondrial biogenesis decreases the release of microparticles from endothelial cells. <u>Am J Physiol Heart Circ Physiol</u>. 309(3):H425-433. PMID: 26024684 **Impact Factor= 3.838.**

Dianne M. Babbitt, Ji-Seok Kim, Steven J. Forrester, **Michael D. Brown**, Joon-Young Park. (2015) Effect of Interleukin-10 and Laminar Shear Stress on Endothelial Nitric Oxide Synthase and Nitric Oxide in African American Human Umbilical Vein Endothelial Cells. <u>Ethnicity & Disease</u>. 25(4): 413-418. PMID: 26674844 **Impact Factor= 1.00.**

Abeer M Mahmoud, **Michael D Brown**, Shane A Phillips, Jacob M Haus. (2015). Skeletal Muscle Microvascular Function: A Counterbalance of Insulin Action. <u>Microcirculation</u>. 22(5):327-47. PMID: 25904196

Impact Factor= 2.263.

Abeer M. Mahmoud, Mary R. Szczurek, Brian K. Blackburn, Jacob T. Mey, Zhenlong Chen, Austin T. Robinson, Jing-Tan Bian, Richard D. Minshall, **Michael D. Brown**, John P. Kirwan, Shane A. Phillips, Jacob M. Haus.(2016). Hyperinsulinemia Augments Endothelin-1 Release and Impairs Vasodilation of Human Skeletal Muscle Arterioles. <u>Physiological Reports</u>. 4(16):1-15. PMID: 27796268.

Impact Factor= 1.61.

Kretzschmar J, Babbitt DM, Diaz KM, Feairheller DL, Sturgeon KM, Perkins-Ball AM, Williamson ST, Ling C, Grimm H, **Brown MD**. (2017). Differential Response to Exercise in African Americans with High Levels of Inflammation. <u>Ethnicity Disease</u>. 27(3):233-240. PMID: 28811734.

Impact Factor= 1.11.

Babbitt DM, Perkins AM, Diaz KM, Feairheller DL, Sturgeon KM, Veerabhadrappa P, Williamson ST, Kretzschmar J, Ling C, Lee H, Grim H, **Brown MD**. (2017). Adherence to Exercise Prescription and Improvements in the Clinical and Vascular Health of African Americans. Int. J. Exercise Science. 10(2):246-257. PMID: 28344738 Impact Factor= 2.7.

Austin T. Robinson, Varadarajan Sudhahar, Ibra S. Fancher, Jing Tan Bian, Marc D. Cook, Mohamed M. Ali, Masuko Ushio-Fukai, **Michael D. Brown**, Tohru Fukai, and Shane A. Phillips. (2017). Aerobic Exercise Reduces Oxidative Stress Produced by Acute High Intraluminal Pressure in Adipose Microvasculature. <u>American Journal of Physiology</u>. 312(5): 896-906. PMID: 28235790.

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Prendergast HM, Del Rios M, Petzel-Gimbar R, Garside D, Heinert S, Escobar-Schulz S, Kotini-Shah P, **Brown MD**, Chen J, Colla J, Fitzgibbon M, Durazo-Arvizu RA, Daviglus M. (2018). A hypertension emergency department intervention aimed at decreasing disparities: Design of a randomized clinical trial. <u>Contemporary Clinical Trials</u>. 64:1-7. PMID: 29128648 **Impact Factor= 1.14.**

Invited Reviews

JM Hagberg, JJ Park, and **MD Brown**. (2000). The role of exercise training in the treatment of hypertension: an update. Sports Medicine. 30(3): 193-206. PMID: 10999423. **Impact Factor=5.15.**

JM Hagberg and **MD Brown**. (1994). Does exercise training play a role in the treatment of essential hypertension? <u>Journal of Cardiovascular Risk (In 2003 became the European J of Cardiovascular Prevention & Rehabilitation)</u>. 2(4): 296-302. PMID: 8536146. **Impact Factor= 2.633.**

Robert Carter III, Samuel N. Cheuvront, C. Keith Harrison, Larry Proctor, Kathryn H. Myburgh, **Michael D. Brown**, and Robert M. Malina. (2010). Success, Race and Athletic Performance: Biology, Belief or Environment? Journal for the Study of Sports and Athletes in Education. 4(3): 207-229.

Impact Factor= Not provided.

SA Phillips, AM Mahmoud, **MD Brown**, JM Haus. (2014). Exercise interventions and peripheral arterial function: implications for cardio-metabolic disease. <u>Progress Cardiovascular Disease</u>. 57(5): 521-534.

Impact Factor= 2.418

Manuscripts in Press

Hojun Lee, Kijeong Kim, Boa Kim, Junchul Shin, Sudarsan Rajan, Xiongwen Chen, **Michael D Brown**, Sukho Lee, and Joon-Young Park. A cellular mechanism of muscle memory facilitates mitochondrial remodeling following resistance training. <u>Journal of Physiology</u>.

Manuscripts in Review

Marc D. Cook, Chenyi Ling, Heather Grimm, Adelola Adeyemo, and **Michael D. Brown**. MMP-2 dysfunction in African Americans Endothelial Cells: A Potential Biomarker of Hypertension Risk. <u>Vascular Health and Risk Management</u>.

Chenyi Ling, Marc Cook, Heather Grimm, **Michael D. Brown**. Racial differences in CRP-induced responses in endothelial cells: effects on eNOS, NO, adhesion molecules and ET-1. <u>American Journal of Physiology Cell Physiology</u>.

Ahmed Khocht, Thomas Rogers, Malvin Janal, **Michael Brown**. Gingival Fluid Inflammatory Biomarkers and Hypertension in African Americans. <u>JDR Clinical and Translational Research</u>.

Talks, Abstracts, and other Professional Papers Presented.

[The first author is the primary author. The last author is the senior author]

Refereed Conference Presentations

National

- 1. **MD Brown**, N Taylor-Tolbert, SD McCole, DR Dengel, JM Hagberg. 1994. Systolic blood pressure is reduced following a single bout of exercise. <u>Medicine and Science in Sports & Exercise</u>. 26: S163.
- 2. **MD Brown**, GE Moore, MT Korytkowski, JM Hagberg. 1995. Insulin resistance syndrome is modified in hypertensive African-Americans by short-term exercise training. Medicine and Science in Sports & Exercise. 28: S152.
- 3. DR Dengel, RV Hogikyan, **MD Brown**, SG Glickman, MA Supiano. 1996. Differential effect of dietary salt intake on insulin sensitivity. <u>Journal of Investigative Medicine</u>. 44(3): 336A.
- 4. DR Dengel, RV Hogikyan, **MD Brown**, SG Glickman, MA Supiano. 1996. Dietary salt restriction does not improve insulin sensitivity in hypertensives regardless of salt-sensitivity status. <u>Journal of Investigative Medicine</u>. 44(7): 370A.
- 5. SG Glickman, DR Dengel, **MD Brown**, MA Supiano, RV Hogikyan. 1996. Salt induced changes in glomerular filtration fraction predict changes in insulin sensitivity in elderly hypertensives. Integrative Biology of Exercise Meetings.
- 6. SD McCole, **MD Brown**, GE Moore, JM Zumuda, J Cwynar, JM Hagberg. 1997. Maximal exercise cardiovascular hemodynamics in postmenopausal women are independent of hormone replacement therapy. <u>Medicine and Science in Sports & Exercise</u>. 29: S11.
- 7. DR Dengel, RV Hogikyan, **MD Brown**, SG Glickman, MA Supiano. 1997. Dietary salt intake has no effect on insulin sensitivity in hypertensives regardless of salt-sensitivity status. Medicine and Science in Sports & Exercise. 29: S19.

- 8. **MD Brown**, DR Dengel, RV Hogikyan, MA Supiano. 1997. Salt-resistant hypertension is not associated with higher sympathetic nervous system activity. <u>Journal of Investigative Medicine</u>. 45 (3): 281A.
- 9. SG Glickman, DR Dengel, **MD Brown**, RV Hogikyan, MA Supiano. 1997. Abdominal obesity determined by dual energy x-ray absorptiometry is associated with insulin sensitivity. <u>Journal of Investigative Medicine</u>. 45 (7): 343A.
- 10. **MD Brown**, DR Dengel, RV Hogikyan, MA Supiano. 1997. Exercise training in older hypertensives is associated with reduced sympathetic nervous system activity. <u>Journal</u> of Investigative Medicine. 45 (7): 326A.
- 11. **MD Brown**, DR Dengel, RV Hogikyan, MA Supiano. 1997. Nitric oxide biomarkers are associated with the blood pressure lowering effect of dietary sodium restriction in older hypertensives. <u>Circulation</u>. 96(8): I539-I540.
- 12. RJ Cleland, **MD Brown**, DR Dengel, MA Supiano. 1998. Dietary sodium induced increase in renal function is associated with an increase in nitrite levels. <u>Medicine and Science in Sports & Exercise</u>. 30(5): S62.
- 13. **MD Brown**, M Srininvasan, RV Hogikyan, DR Dengel, SG Glickman, A Galecki, MA Supiano. 1998. Nitric oxide biomarkers increase during exercise-induced vasodilation in the forearm. Medicine and Science in Sports & Exercise. 30(5): S212.
- 14. **MD Brown**, DR Dengel, RV Hogikyan, MA Supiano. 1998. Relationship between blood pressure and sympathetic nervous system activity following exercise training in older hypertensives. <u>Journal of American Geriatric Society</u>. 46: S106.
- 15. AR Woznick, SG Glickman, DR Dengel, **MD Brown**, RV Hogikyan, MA Supiano. 1998. Central adiposity assessed by DEXA provides a gender-independent predictor of insulin sensitivity in older hypertensives. Journal of American Geriatric Society. 46: S16.
- 16. DR Dengel, **MD Brown**, RV Hogikyan, MA Supiano. 1998. Improvement in renal function in older hypertensives is associated with increase in maximal aerobic capacity. Medicine and Science in Sports & Exercise. 30(5): S160.
- 17. **MD Brown**, SD McCole, GE Moore, MT Korytkowski, JM Hagberg. 1999. Maximal oxygen consumption and body composition play a greater role in determining insulin sensitivity than hormone replacement therapy in postmenopausal women. <u>Medicine and Science in Sports & Exercise</u>. 31(5): S379.
- 18. SD McCole, JM Hagberg, **MD Brown**, GE Moore, RE Ferrell. 2000. AGT genotypes are not associated with VO2max in postmenopausal women. *Federation of* <u>American Societies for Experimental Biology</u>, *Program Addendum*, *p8*.
- 19. DR Dengel, **MD Brown**, R Cleland, RV Hogikyan, MA Supiano. 2000. Role of reninangiotensin-aldosterone system in sodium sensitivity in older hypertensives. <u>FASEB J.</u> 14: A369.
- 20. **MD Brown**, JJ Park, DR Dengel, RV Hogikyan, MA Supiano. 2000. The role of ACE and eNOS gene polymorphisms on blood pressure sensitivity to sodium in older hypertensives. FASEB J. 14: A57.
- 21. JJ Park, **MD Brown**, DR Dengel, MA Supiano. 2001. Salt-sensitivity and exercise training-induced blood pressure reduction in older hypertensives. <u>American Journal of Hypertension</u>. 14(4): 142A.

- 22. JJ Johnson, JJ Park, JM Hagberg, RE Ferrell, SD McCole, GE Moore, **MD Brown**. 2001. ACE gene polymorphism and exercise training-induced changes in sodium excretion in African Americans. Medicine and Science in Sports & Exercise. 33(5): S322.
- 23. JJ. Park, **MD Brown**, JM Hagberg, RE Ferrell, DA Phares, EP Weiss, D Vizcaino. 2001. Effects of ACE and APO E gene polymorphisms on exercise training-induced changes in nitric oxide metabolites. <u>Medicine and Science in Sports & Exercise</u>. 33(5): S322.
- TH Reynolds, MD Brown, MA Supiano, DR Dengel. 2001. Aerobic exercise training improves insulin sensitivity independent of plasma TNF-alpha levels in older hypertensives. Medicine and Science in Sports & Exercise. 33(5): S3.
- 25. EP Weiss, **MD Brown**, AR Shuldiner, RE Ferrell, JM Zmuda, SD McCole, GE Moore, JM Hagberg. 2001. FABP2 genotype is associated with insulin sensitivity in older women. Medicine and Science in Sports & Exercise. 33(5): S3.
- 26. DA Phares, SD McCole, AR Shuldiner, **MD Brown**, GE Moore, RE Ferrell, KR Wilund, JM Hagberg. 2001. β_2 and β_2 -adrenergic receptor polymorphisms and exercise hemodynamics in postmenopausal women. <u>Medicine and Science in Sports & Exercise</u>. 33(5): S322.
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- 30. JM. Jones, JJ Johnson, MR Weir, TC Dowling, D Vizcaino, JJ Park, T Obisesan, BD Hand, **MD Brown**. Effects Of Exercise On The Relationship Between Urinary Endothelin-1 and Sodium Excretion In Hypertensive African Americans. <u>International Society on Hypertension in Blacks</u>. Miami, FL. 6/8/02-6/12/02.
- 31. D Vizcaino, TC Dowling, JJ Johnson, JM Jones, JJ Park, BD Hand, **MD Brown**. 2002. Effects of short-term exercise training on renal hemodynamics in hypertensive African Americans. Medicine and Science in Sports & Exercise. 33(5): S115.
- 32. BD Hand, JJ Park, JJ Johnson, D Vizcaino, JM Jones, RE Ferrell, **MD Brown**. 2002. Effects of eNOS gene polymorphism on 24-hour urinary nitric oxide metabolite levels after acute exercise. Medicine and Science in Sports & Exercise. 33(5): S189.
- 33. JM Jones, RE Ferrell, JJ Johnson, JJ Park, T Obisesan, BD Hand, **MD Brown**. 2002. Genetic effects of sodium excretion in hypertensive African Americans: effects of short-term exercise training. Medicine and Science in Sports & Exercise. 33(5): S190.
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- 37. BD Hand, MH Roltsch, RE Ferrell, SA Data, JJ Park, MD Kostek, **MD Brown**. Interactive effects of eNOS T-786C gene polymorphism and cardiovascular fitness on flow-mediated dilation in females. Medicine and Science in Sports & Exercise. 35 (5): S378.
- 38. DR Dengel, **MD Brown**, RE Ferrell, TH. Reynolds, MA Supiano. 2003. The renal hemodynamic response to dietary sodium is associated with the eNOS gene, American College of Sports Medicine National Conference.
- 39. **MD Brown**, MR Weir, TC Dowling, RE Ferrell, JJ Johnson, D Vizcaino, JM Jones, JJ Park, BD Hand, TO Obisesan. 2003. ACE gene polymorphism is associated with exercise training-induced changes in Na⁺ excretion in African American hypertensives. American Journal of Hypertension. 16 (5): 78A.
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- 43. JM Jones, TC Dowling, DA Phares, **MD Brown**. 2004. Six Months of Aerobic Exercise Training Reduces Plasma Aldosterone Levels in Caucasian Prehypertensives but Not in Prehypertensives of African Descent, Integrative Biology of Exercise Meetings.
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- 46. SJ Prior, CM Paton, DA Phares, **MD Brown**, JM Hagberg, SM Roth. 2005. DNA sequence variation in the VEGF gene and plasma VEGF protein levels. American College of Sports Medicine.

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- 48. NM Fenty, SM Roth, M Bathula, JY. Park, **MD. Brown**. 2006. AT1R A1166C polymorphism is associated with plasma angiotensin II levels, but not ambulatory blood pressure responses to aerobic exercise. <u>Journal of Clinical Hypertension</u>, 8(5), Supplement A.
- 49. JY Park, NM. Fenty, SM. Roth, **MD Brown**. 2006. iNOS (CCTTT)n Pentanucleotide Repeats are Associated with Glomerular Filtration Rate in Prehypertensives. American Society of Hypertension.
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- 52. TJ Ellis, NM Fenty, JY Park, DA Phares, **MD. Brown**, JM Hagberg. 2007. Changes in Reactive Hyperemia and Plasma Ox-LDL Levels with Aerobic Exercise Training are Inversely Related. American College of Sports Medicine.
- 53. Sturgeon K., **Brown M**., Basu S., Fenty-Stewart NM. 2007. Relationship of F₂lsoprostanes to Changes in Blood Pressure Dipping/Nondipping Status After Exercise Training. Mid-Atlantic American College of Sports Medicine.
- 54. NM Fenty-Stewart, JY Park, SM Roth, JM Hagberg, S Basu, RE Ferrell, **MD. Brown**. (2008). Influence of *AGTR1* Gene Variants and Aerobic Exercise Training On Angiotensin II And Oxidative Stress. American College of Sports Medicine.
- 55. Deborah L. Feairheller, Kathleen M. Sturgeon, Keith M. Diaz, Dong Xin, Sheara Williamson, Praveen Veerabhadrappa, & **Michael D. Brown**. (2009). Relationship Between Nitric Oxide Levels, Ambulatory Blood Pressure, And Renal Function In African Americans. 63rd American Heart Association Council for High Blood Pressure Research Conference, Chicago, IL.
- 56. Praveen Veerabhadrappa, Deborah Crabbe, Keith M. Diaz, Garima Sharma, Valaine Hewitt, Deborah L. Feairheller, Kathleen M. Sturgeon, Sheara T. Williamson, Debra Ahrensfield, Abul Kashem, **Michael D. Brown**. 2010. Early Diastolic Dysfunction Correlates With Lower Aerobic Capacity in Pre-Hypertensive African Americans. Annual Meeting and inaugural World Congress of Exercise is Medicine of the American College of Sports Medicine, Baltimore, Maryland, June 1-5.
- 57. Deborah L. Feairheller, Keith M. Diaz, Kathleen M. Sturgeon, Sheara T. Williamson, **Michael D. Brown**. 2010. Differentiating Racial Differences in Time-Course Oxidative Stress Responses to Acute Exercise. Annual Meeting and inaugural World Congress of Exercise is Medicine of the American College of Sports Medicine, Baltimore, Maryland, June 1-5.
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- 60. Deborah L Feairheller, Joon-Young Park, Kathleen M Sturgeon1, Boa Kim, Sheara T Williamson, Keith M Diaz, **Michael D Brown**. Differentiating racial differences in oxidative stress levels: in vitro and in vivo. (2010). Experimental Biology, Anaheim, CA.
- 61. Keith M. Diaz, Deborah L. Feairheller, Kathleen M. Sturgeon, Sheara T. Williamson, & Michael D. Brown. (2010) Effects of training status on time course oxidative stress response to a sub-maximal exercise test. Annual Meeting and inaugural World Congress of Exercise is Medicine of the American College of Sports Medicine, Baltimore, Maryland.
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- 64. Praveen Veerabhadrappa, Keith M. Diaz, Deborah Crabbe, Garima Sharma, Deborah L. Feairheller, Kathleen M. Sturgeon, Sheara Williamson, Sunny Thakkar, Jan Kretzschmar, Abul Kashem & **Michael D. Brown**. hs-CRP is Associated with Abnormal LV Filling Pressure in African Americans with Preserved Systolic Function. International Society of Hypertension in Blacks, October 2010, Chicago, IL.
- 65. Joon-Young Park, Boa Kim, **Michael D. Brown**, Ji-Seok Kim. Effects of Oxygen Tension in Shear Stress-Induced eNOS Activation in Human Endothelial Cells. Integrative Physiology of Exercise. September 2010, Miami, Florida.
- 66. Praveen Veerabhadrappa, Keith M. Diaz, Kathleen M Sturgeon, Deborah L. Feairheller, Sheara T. Williamson, Deborah Crabbe, Abul Kashem, & Michael D. Brown. Endothelial Dysfunction in African Americans with Masked Hypertension. International Society of Hypertension, September 2010, Vancouver.
- 67. Praveen Veerabhadrappa, Keith M. Diaz, Deborah L. Feairheller, Kathleen M. Sturgeon, Sheara T. Williamson, Deborah L. Crabbe, Jan Kretzschmar & **Michael D. Brown.**Masked hypertension in prehypertensive African Americans after dietary stabilization.
 American Heart Association Scientific Sessions, November 2010, Chicago, IL.
- 68. **Brown, M.D.**, Feairheller, D.L., Veerabhadrappa, P., Park, J.Y. Racial Differences in Tumor Necrosis Factor-alpha-Induced Endothelial Microparticle and Interleukin-6 Production. American Heart Association; High Blood Pressure Research Scientific Sessions; Washington DC, October 2010.

- 69. Abul Kashem, Praveen Veerabhadrappa, Deb Feairheller, Keith Diaz, Sheara Williamson, Mohamad Alkhouli, Chirdeep Patel, Nabeel Memon, Debbie Ahrensfield, Deborah Crabbe, Anthony Eubanks, **Michael Brown**. Effect of Pre-hypertension on Endothelial function and Intima Media Thickness of the Carotid Artery in African Americans. American College of Cardiology 60th Annual Scientific Sessions 2011.
- 70. Diaz, K.M., Veerabhadrappa, P., Kashem, M.A., Feairheller, D.L., Strugeron, K.M., Williamson, S.T., Thakkar, S., Crabbe, D.L., Kretzschmar, J., & **Brown, M.D**. Increased Blood Pressure Variability in African Americans with Endothelial Dysfunction. Presented at American Heart Association Conference; NHLBI Cardiovascular Research Supplement Awardee Session; Chicago, November 2010.
- 71. Katie, Sturgeon, Joon Young Park, Boa Kim, **Michael Brown**. Laminar Shear Stress Pre-Conditioning Restores VEGFR2 Activation Following an Oxidant Challenge in Endothelial Cells. Experimental Biology Meetings, Washington D.C. April, 2011.
- 72. Deborah Feairheller, Joon Young Park, Boa Kim, **Michael Brown**. Effects of Laminar Shear Stress on Race-dependent Oxidative Stress Responses in Human Umbilical Vein Endothelial Cells. Experimental Biology Meetings, Washington, DC, April, 2011.
- 73. Sturgeon K., Mergaman R., Feairheller D., Diaz K., Veerabhadrappa P., Williamson S., and Brown MD. Dietary Magnesium Levels Below the Daily Recommended Intake are Associated with Higher Cholesterol Levels in Pre-hypertensive African Americans. American Heart Association Council on Nutrition, Physical Activity, and Metabolism Meeting, Atlanta, GA, 2011.
- 74. Deborah L. Feairheller, Kathleen M. Sturgeon, Boa Kim, Keith M. Diaz, Sheara T. Williamson, Praveen Veerabhadrappa, Jan Kretzschmar, Joon-Young Park, & **Michael D. Brown**. Translational Approach to Understanding Endothelial Adaptations to Exercise. Annual Meeting and of the American College of Sports Medicine, Denver, CO, May, 2011.
- 75. Charmie G. Vin, Keith M. Diaz, Deborah L. Feairheller, Kathleen M. Sturgeon, Sheara T. Williamson, Praveen Veerabhadrappa, Deborah L. Crabbe, Jan Kretzschmar & **Michael D. Brown**. Comparison Of Changes In Fasting Glucose Levels After Aerobic Exercise Training In Pre- And Post-menopausal African American Women. Annual Meeting and of the American College of Sports Medicine, Denver, CO, May 2011.
- 76. Jan Kretzschmar, Deborah L. Feairheller, Joon Y. Park, Boa Kim, Kathleen Sturgeon, Keith M. Diaz, Sheara T. Williamson, Praveen Veerabhadrappa, Chenyi Ling, Michael D. Brown. In Vitro Shear Stress Responses of Endothelin-1 in African American and Caucasian HUVECs. Annual Meeting and of the American College of Sports Medicine, Denver, CO, May 2011.
- 77. Boa Kim, Ji-Seok Kim, Deborah Feairheller, Katie Sturgeon, **Michael Brown** and Joon-Young Park. Effects of Laminar Shear Stress on Mitochondrial Biogenesis in Human Umbilical Vein Endothelial Cells, Annual Meeting and of the American College of Sports Medicine, Denver, CO, 2011.
- 78. Kathleen Sturgeon, Deborah Feairheller, Boa Kim, Joon-Young Park, & **Michael Brown**. Endothelial Nitric Oxide Synthase Activation: Laminar Shear Stress vs. Low Oxidant Conditions. Annual Meeting and of the American College of Sports Medicine, Denver, CO, 2011.

- 79. Sunny Thakkar, Keith M. Diaz, Deborah L. Feairheller, Kathleen M. Sturgeon, Praveen Veerabhadrappa, Sheara T. Williamson, Deborah L. Crabbe, Jan Kretzschmar, & Michael D. Brown. Aerobic Exercise Training Decreases Circulating Endothelial Microparticles in Female African Americans. Annual Meeting and of the American College of Sports Medicine, Denver, CO, May, 2011.
- 80. Diaz, K.M., Feairheller, D.L., Sturgeon, K.S., Veerabhadrappa, P., Williamson, S., Kretzschmar, J., & **Brown, M.D**. Aerobic Exercise Training Improves Renal Function in African Americans. Presented at the American Society of Hypertension Conference; New York, NY, May 2011.
- 81. Williamson, S.T., Feairheller, D.L., Diaz, K.M., Sturgeon, K.M., Veerabhadrappa, P., Varma, D., **Brown, M.D.**, & Jansen, S. Aerobic Capacity Correlates with Urinary Thromboxane Concentration in Pre-Hypertensive African Americans. *Journal of Clinical Hypertension*, 12, Supplement A, 2010. Presented at American Society of Hypertension Annual Scientific Meeting; New York, NY, May 2010.
- 82. Williamson, S., Feairheller, D.L., Diaz, K.M., Sturgeon, K.M., Veerabhadrappa, P., Kretzschmar, J., & **Brown, M.D.** Aerobic Exercise Training Improves Endothelial Dysfunction in Pre-Hypertensive African Americans. Presented at the American Society of Hypertension Annual Scientific Meeting, New York, NY, May 2011.
- 83. Fullwood, **M.D., Brown**, M.D., Sturgeon, K.M., Williamson, S.T., Veerabhadrappa, P., Kretzschmar, J., Diaz, K.M., & Feairheller, D.L. Effects of Exercise Training on Indices of Endothelial Status in African Americans. Presented at American College of Sports Medicine Annual Meeting, Denver, CO, May, 2011.
- 84. Amanda M. Perkins, Kathleen M. Sturgeon, Deborah L. Feairheller, Michael L. Sachs, **Michael D. Brown**. The Development of F.L.E.A.T. Adherence Coaching for African Americans Enrolled in a 6-month Exercise Intervention. Presented at American College of Sports Medicine Annual Meeting, Denver, CO, May, 2011.
- 85. Williamson, S.T., Feairheller, D.L., Diaz, K., Sturgeon, K.M., Veerabhadrappa, P., Kretzschmar, J., & **Brown, M.D**. Endothelial Dysfunction is Associated with Aerobic Capacity in Prehypertensive African Americans. E-Conference, 2010.
- 86. Praveen Veerabhadrappa, Keith M. Diaz, Sheara T. Williamson, Deborah L. Feairheller, Kathleen M. Sturgeon, & **Michael D. Brown** Clinical Blood Pressure Phenotypes and low grade systemic inflammation in African Americans. American Heart Association High Blood Pressure Research Council Conference, Orlando, FL, September 2011.
- 87. Jan Kretzschmar, Deborah L. Feairheller, Boa Kim, Chenyi Ling, Joon Y. Park & **Michael D. Brown**. Exercise-like Levels of Shear Stress Modulate the Vasomotor Control Mediators Nitric Oxide and Endothelin-1. American Heart Association High Blood Pressure Research Council Scientific Sessions, Orlando, FL, September 2011.
- 88. Thakkar, S.R., Diaz, K.M., Feairheller, D.L., Sturgeon, K.M., Williamson, S.T., Kim, B., Park, J.Y., Kretzschmar, J., Ling, C., Crabbe, D.L., **Brown, M.D**. Aerobic Exercise Training Decreases Circulating Endothelial Microparticles in African Americans by Chronic Laminar Shear Stress: In Vivo and In Vitro Study. American Heart Association's High Blood Pressure Research Council Scientific Sessions, Orlando, FL, September 2011.

- 89. Jan Kretzschmar, Deborah Crabbe, Deborah L. Feairheller, Kathleen Sturgeon, Keith M. Diaz, Sheara T. Williamson, Praveen Veerabhadrappa, Chenyi Ling, Amanda Perkins, Kassandra McGlonn, Olivia Menardy, **Michael D. Brown**. Aerobic Exercise Training Improves Heart Rate Recovery Activity in Sedentary African Americans with Abnormal Diastolic Function. American College of Sports Medicine, San Francisco, CA, May 2012.
- 90. Keith M. Diaz, Deborah L. Feairheller, Kathleen M. Sturgeon, Sheara T. Williamson, Praveen Veerabhadrappa, Jan Kretzschmar, Amanda Perkins, Chenyi Ling, Deborah L. Crabbe, **Michael D. Brown**. The Effects of Aerobic Exercise Training on Visit-to-Visit and Ambulatory Blood Pressure Variability in Non-Hypertensive and Hypertensive African Americans, American Heart Association's Nutrition, Physical Activity and Metabolism/Cardiovascular Disease Epidemiology and Prevention Council Scientific Sessions, San Diego, CA, 2012.
- 91. **Brown MD, Moderator** Thematic Poster session, Diabetes. American Heart Association's Nutrition, Physical Activity and Metabolism/Cardiovascular Disease Epidemiology and Prevention Council Scientific Sessions, San Diego, CA, 2012.
- 92. Heather Grimm, Chenyi Ling, Jan Kretzschmar, **Michael D. Brown**. Race Dependent Effects of C Reactive Protein on the Vasomotor Modulators ET1 and NO in HUVECs. American Heart Association High Blood Pressure Research Council Scientific Sessions, Washington, DC September 2012.
- 93. Jan Kretzschmar, Deborah L. Feairheller, Kathleen Sturgeon, Keith M. Diaz, Sheara T. Williamson, Praveen Veerabhadrappa, Chenyi Ling, Amanda Perkins, Heather Grimm, Hojun Lee, Dianne Babbitt, Deborah L. Crabbe, Abul M. Kashem, **Michael D. Brown**. Effects Of Aerobic Exercise Training On C-Reactive Protein Levels In Normotensives Versus Non-Normotensives. American Heart Association High Blood Pressure Research Council Scientific Sessions, Washington, DC September 2012.
- 94. Jan Kretzschmar, Deborah L. Feairheller, Kathleen Sturgeon, Keith M. Diaz, Sheara T. Williamson, Praveen Veerabhadrappa, Chenyi Ling, Amanda Perkins, Heather Grimm, Hojun Lee, Dianne Babbitt, Deborah L. Crabbe, Abul M. Kashem, **Michael D. Brown**. Associations Between Improved Fitness And A Marker Of Hypertension Associated Neuro-Degenerative Disease S100B. American Heart Association High Blood Pressure Research Council Scientific Sessions, Washington, DC September 2012.
- 95. Chenyi Ling, Keith M. Diaz, Jan Kretzschmar, Deborah L. Feairheller, Kathleen Sturgeon, Sheara T. Williamson, Praveen Veerabhadrappa, Amanda Perkins, Hojun Lee, Heather Grimm, Dianne Babbitt, Abul Kashem, **Michael D. Brown**. High sodium excretion is not associated with reduced vasodilation in healthy African American adults. American Heart Association High Blood Pressure Research Council Scientific Sessions, Washington, DC September 2012.
- 96. Praveen Veerabhadrappa, Abul Kashem, Priya Kothapalli, Chenyi Ling, Keith Diaz, Deborah Feairheller, Jan Kretzschmar, Kathleen Sturgeon, Sheara Williamson, Deborah Crabbe, Deborah Ahrensfield, **Michael Brown**. Six months of lifestyle intervention reduces carotid intima-media thickness in African American adults. High sodium excretion is not associated with reduced vasodilation in healthy African American adults. American Heart Association High Blood Pressure Research Council Scientific Sessions, Washington, DC September 2012.

- 97. Deborah L. Crabbe, Kathleen M. Sturgeon, Karen M. Fossile, Keith M. Diaz, Praveen Veerabhadrappa, Hardik M. Vora, Deborah Feairheller, Sheara Williamson, Dong Xin, and **Michael D. Brown**. Menopausal Status Alters Oxidative Stress Markers and Diastolic Function in Middle-Age African-American Women. Women's Health Congress, The Academy of Women's Health, Washington D.C. March 2012.
- 98. Chenyi Ling, Keith M. Diaz, Jan Kretzschmar, Deborah L. Feairheller, Kathleen Sturgeon, Sheara T. Williamson, Praveen Veerabhadrappa, Amanda Perkins, Hojun Lee, Heather Grimm, Dianne Babbitt, **Michael D. Brown**. Relationship between aerobic exercise training and nocturnal blood pressure non-dipping status in normotensive adults. American College of Sports Medicine Annual meeting, Indianapolis, IN. May 2013.
- 99. Amanda M. Perkins, Dianne Babbitt, Keith Diaz, Heather Grimm, Chenyi Ling, Jan Kretzschmar, **Michael D. Brown**. Biopsychosocial Correlates of Exercise Adherence among African Americans Enrolled in the Fit 4 Life Study. American College of Sports Medicine Annual meeting, Indianapolis, IN. May 2013.
- 100. Dianne Babbitt, Amanda M. Perkins, Keith Diaz, Heather Grimm, Chenyi Ling, Jan Kretzschmar, Michael D. Brown. Effect of 6-months Aerobic Exercise on Biomarkers Interleukin-10 and Endothelial Microparticle CD62E in African Americans. American College of Sports Medicine Annual meeting, Indianapolis, IN. May 2013.
- 101. Ji-Seok Kim, Hojun Lee, Boa Kim, Brittany E. Wilson, Keisuke Kawata, Sunny Thakkar, Michael D. Brown, Joon-Young Park1. 1Temple University, Philadelphia, PA. 2University of Illinois at Chicago, Chicago, IL. Effects of Flow-Mediated Shear Stress on Vascular Homeostasis: Implications on Mitochondrial Biogenesis and Microparticles Formation. American College of Sports Medicine Annual meeting, Indianapolis, IN. May 2013.
- 102. Chenyi Ling, Keith M. Diaz, Jan Kretzschmar, Deborah L. Feairheller, Kathleen Sturgeon, Sheara T. Williamson, Praveen Veerabhadrappa, Amanda Perkins, Hojun Lee, Heather Grimm, Dianne Babbitt, **Michael D. Brown**. Association between nocturnal pulse pressure reduction and C-reactive protein in prehypertension stage. 2nd International Conference on PreHypertension & CardioMetabolic Syndrom. Barcelona, Spain, Jan 2013.
- 103. Ling, C., Diaz, K.M., Kretzschmar, J., Feairheller, D.L., Sturgeon, K., Williamson, S.T., Veerabhadrappa, P., Perkins, A., Lee, H., Grimm, H., & Brown, M.D. Non-dipping systolic blood pressure status and C -reactive protein level in normotensive adults. Presented at the American Society of Hypertension Annual Scientific Meeting, San Francisco, CA; May 2013.
- 104. Ling, C., Kretzschmar, J., Grimm, H., & **Brown, M**. Effects of gender and race on interleukin-6 production in response to CRP in HUVECs. Presented at Experimental Biology, Boston, MA; April 2013.
- 105. Crabbe, D.L., Fossile, K.M., Moser, C., Diaz, K.M., Veerabhadrappa, P., Eubanks, A., Feairheller, D.L., Sturgeon, K.M.,& **Brown, M.D**. Missed Opportunity to Favorably Alter CVD Risk Factors in African Americans, especially African American Women. Presented at the Annual Congress of Women's Health, Washington DC; March 2013.

- 106. Babbitt, D.M.; Perkins, A.M.; Diaz, K.M.; Feairheller, D.L.; Sturgeon, K.M.; Veerabhadrappa, P.; Williamson, S.T.; Kretzschmar, J.; Ling, C.; Lee, H.; Grimm, H.; **Brown, M.D**. Adherence levels to an aerobic exercise training intervention in African Americans have no adverse impact on favorable endothelial adaptations."(Abstract) <u>J American Soc of Hypertension</u>. Volume 8:4, Supplement e115 May 2014.
- 107. Abeer M Mahmoud, Mary R Szczurek, Austin T Robinson, Jacob T Mey, Brian K Blackburn, Jing-Tan Bian, **Michael D Brown**, Phillips A Shane, Jacob M Haus. Hyperinsulinemia Disrupts Vascular Homeostasis, Enhances Oxidative Stress and Impairs Flow Induced Dilation of Human Skeletal Muscle Arterioles. American Heart Association Scientific Sessions, Chicago, IL. June 2014.
- 108. Heather Grimm, Jan Kretzschmar, **Michael D. Brown**. Racial Differences in Vascular Function. North American Artery Society Annual Meeting. Chicago, IL September, 2014.
- 109. Chenyi Ling, Jan Kretzschmar, Heather Grimm, **Michael Brown**. Racial differences of eNOS expression respond to C-reactive protein. North American Artery Society Annual Meeting. Chicago, IL September, 2014.
- 110. Maitha Aldokhayyil, Chenyi Ling, Marc D. Cook, Heather Grimm, Michael Brown. Racial Differences in CRP Receptor and Influence on eNOS Bioactivity and NO Production in Endothelial Cells. Experimental Biology Meeting, Chicago, IL April 2017.
- 111. AT Robinson, MD Cook, MD Brown, and SA Phillips. Laminar Shear Stress Reduces NADPH Oxidase II Expression but Does Not Increase Superoxide Dismutase Expression in Human Adipose Microvascular Endothelial Cells. Experimental Biology Meeting, Chicago, IL April 2017.
- 112. Kanokwan Bunsawat, Georgios Grigoriadis, Sang Ouk Wee, Garett Griffith, Michael D. Brown, Shane A. Phillips, Paul J. Fadel, Philip S. Clifford, Bo Fernhall, Tracy Baynard. No Evidence of Impaired Functional Sympatholysis in Young Obese Adults. Experimental Biology Meeting, Chicago, IL April 2017.
- 113. Adelola Adeyemo, Chenyi Ling, Marc D. Cook, Heather Grimm, Michael Brown. Racial Differences in Cell Adhesion Molecule Expression in HUVECs. Experimental Biology Meeting, Chicago, IL April 2017.
- 114. Moderator, Sleep and Cardiovascular Risk, North American Artery 7th Annual Meeting, Chicago, IL 2017.
- 115. Moderator, Health Disparities and Cardiovascular Risk, North American Artery 7th Annual Meeting, Chicago, IL 2017.
- 116. Marc Cook M.S., Adelola Adeyemo, Maitha Aldokhayyil, Michael Brown. In vitro exercise, laminar shear stress, attenuates basal MMP-2 dysfunction in cultured African American endothelial cells. American College of Sports Medicine Annual Meeting, Denver, CO. May, 2017.
- 117. Adelola O. Adeyemo, Chenyi Ling, Heather Grimm, Michael Brown. Increased Laminar Shear Stress Reduces Inflammation-Induced Endothelial Microparticle Apoptosis in HUVECS. Southeast Regional Meeting American College of Sports Medicine, February, 2018.

Invited Talks

11/97 National Institute on Aging Technical Workshop, Bethesda, MD. *Nitric Oxide Production and Exercise.*

6/05 American College of Sports Medicine Symposium, Nashville, TN, The Black Athlete and Athleticism: Are there Cardiovascular Advantages? 4/96 University of Michigan Medical Center, Department of Internal Medicine Research Day. Ann Arbor, Ml. Improvement of Insulin Resistance Syndrome by Short-term Exercise Training in Hypertensive African Americans. 4/97 Central Societies for Clinical Research Meetings, Chicago, IL. Exercise Training in Older Hypertensives is Associated with Reduced Sympathetic Nervous System Activity. 2/97 University of Michigan Medical Center, Department of Internal Medicine Research Day. Ann Arbor, MI. Further Decrements in Insulin Sensitivity in Older Salt-Sensitive Hypertensives. 3/97 Kinesiology Day, University of Michigan, Ann Arbor, MI. Dietary Salt Restriction Does Not Improve Insulin Sensitivity in Older Hypertensive Humans Regardless of Salt-Sensitivity Status. 8/96 Institute of Gerontology Research Seminar. University of Michigan. Ann Arbor, MI. Regulation of Peripheral Circulation. 12/96 Geriatric Research, Education and Clinical Center Fellows Research Seminar. Department of Veterans Affairs Medical Center, Ann Arbor, MI. "Norepinephrine Kinetics and Vascular Adrenergic Responsiveness in Older Hypertensives. 5/97 Geriatric Research, Education and Clinical Center Research Seminar. Department of Veterans Affairs Medical Center, Ann Arbor, MI. Increased Nitric Oxide Biomarkers During Exercise-Induced Vasodilation in the Forearm. 6/98 Twelfth Annual Conference of African Americans in Higher Education, College Park, MD. Wellness Issues Facing the Minority Community in the New Millennium. 9/99 University of Maryland Senior University. Biological Theories of Aging. 11/99 Aerobic exercise training does not impair kidney function or sodium handling in older hypertensive individuals. Central Society for Clinical Research, Chicago, IL. 11/00 University of Maryland Bioscience Research and Technology Review Day. University of Maryland Inn and Conference Center, College Park, MD. ACE gene polymorphism and exercise training-induced changes in sodium excretion in African Americans. 11/00 University of Maryland Bioscience Research and Technology Review Day. University of Maryland Inn and Conference Center, College Park, MD. The role of ACE and eNOS gene polymorphisms on blood pressure sensitivity to sodium in older hypertensives. 10/01 United States Department of Agriculture, Beltsville Human Nutrition Research Center. Beltsville, MD. "Blood Pressure, Genetics, and Exercise in Hypertensive

African Americans".

7/01 Washington DC Veterans Administration Hospital, Cardiology Division, Gene-Environment Interactions on Cardiovascular Disease and Function: Racial/Ethnic Perspectives. 5/02 Howard University General Clinical Research Center Clinical Conference. Washington, DC. Gene-Exercise Interactions in Hypertension. 11/02 American College of Sports Medicine Mid-Atlantic Regional Chapter, Guest Speaker. Recent Developments in the Understanding of Hypertension: Gene-Gene and Gene-Environment Interactions. 4/03 Penn State University, Department of Kinesiology Colloquium, University Park, PA. Kinesiogenomics: Interactions of Genes and Exercise on Cardiovascular Function and Insulin Sensitivity. 4/03 Penn State University, Noll Physiological Research Center Seminar Series. University Park, PA. Gene-Environment Interactions on Cardiovascular Function and Glucose Metabolism. 11/04 University of Delaware, Department of Health, Nutrition and Exercise Sciences Research Seminar. Gene Effects and Gene-Exercise Interactions on Cardiovascular Function. 6/05 ACSM/Black Coaches Association Joint Minority Symposium: The Black Athlete and Athleticism Are There Cardiovascular Advantages? 4/08 Ball State University. School of Physical Education, Sport, and Exercise Science. Grantsmanship. 3/08 Future Faculty Fellowship and Bridge to Doctorate Program, Member of a panel discussion on Surviving a Doctoral Program. Temple University 6/08 Inaugural Internal Advisory and External Advisory Boards Meeting, Center for Minority Health and Health Disparities, Genetics, Vascular Function, and Exercise in African Americans" Temple University School of Medicine. 6/08 Grand Rounds, Cardiology Section, Department of Medicine, Temple University. Endothelial Function in African Americans: Exercise and Genetic Implications for Vascular Health. 3/09 Health Disparities Research Panel, Office of the Senior Vice President for Research and Strategic Initiatives, Temple University Research Week. Hypertension Disparity; Can Lifestyle Modification Play a Role? 5/09 American College of Sports Medicine, Tutorial Lecture. Grant Funding Training Opportunities at NIH: Insights from a NIH Peer Reviewer, K Awardees and a NIH Scientific Review Officer 1/10 University of Maryland College Park, School of Public Health, Department of Kinesiology Research Symposium, Characterizing the Endothelial Phenotype in African Americans.

- American College of Sports Medicine, Tutorial Lecture, "Effects of Shear Stress on Endothelial Cell Phenotype: Insights into the Effects of Exercise, American College of Sports Medicine Annual Meeting, Denver, CO, May, 2011.
- 5/12 American College of Sports Medicine, Symposium Lecture, *Under Pressure: Is Shear the Principle Mediator of Exercise-induced Vascular Adaptation*, American College of Sports Medicine Annual Meeting and and 3rd World Congress on Exercise is Medicine, San Francisco, CA, May, 2012.
- 7/12 American College of Wound Healing and Tissue Repair. *Molecular determinants of wound healing in vulnerable populations.*" Chicago, IL,
- 3/13 University of Massachusetts Amherst, Department of Kinesiology Seminar Series, Endothelial Phenotype in African Americans." Amherst, MA.
- 12/14 University of Illinois at Chicago, Department of Kinesiology and Nutrition,
 Distinguished Speaker Series, *Are Endothelial Microparticles Biological Conveyors of the Endothelium?*
- 6/15 American Diabetes Association Scientific Sessions, *Effects of exercise on Vascular Function in Diabetes.*" Boston MA.
- 8/15 The Chronic Renal Insufficiency (CRIC) Study Informational Session, *Effects of Exercise in Chronic Kidney Disease*.
- 3/16 University of Florida, Department of Applied Physiology and Kinesiology Seminar Series, Effects of Exercise on Vascular Health in African Americans with Hypertension.
- 5/2017 American College of Sports Medicine Annual Meeting, Symposium entitled "Health Disparities in Pressure: Does Exercise Matter?" Presentation entitled" Molecular and Cellular Mechanisms for Differential Blood Pressure Responses to Exercise among African Americans and Caucasians."
- 11/2017 Center for Health Ecology and Equity Research, Auburn University, Research Seminar "Hypertension and African Ame**ricans".**

Grant Funding

National

- National Institute of General Medical Science Individuals National Research Service Award, Predoctoral Fellowship, Grant # RO3 AG1278. Antihypertensive Interventions in African American Hypertensives. Funded 8/93-8/95 (\$40,000). Role: PI
- 2. National Institute on Aging Postdoctoral Research Supplement, Grant # P60 AG08808, Principal Investigator. Older American Independence Center, Regional Norepinephrine Kinetics. Funded 9/96-9/98, (\$160,000). Role: PI
- 3. American Heart Association- Mid-Atlantic Affiliate, Beginning Grant In Aid, Grant #9960316C, Principal Investigator. Renal Hemodynamics, Blood Pressure Regulation, and Exercise in African American Hypertensives. 7/99-6/02. Funded (\$100,000). Role: PI
- 4. **NIH/NIA 2 T32 AG00268-06. Pre-doctoral Training Grant**, Pre-doctoral Training in Exercise Physiology and Aging. 1999-2004, Faculty. **Funded.** (\$600,000).

- National Institute on Aging Career Development Award (KO1), Grant #
 1KO1AG019640-01A2, Principal Investigator, Endothelial Nitric Oxide Synthase Gene
 Polymorphism, Blood Pressure, Renal Hemodynamics, and Exercise in African
 American Hypertensives. Funded 1/1/03-2/28/09 (1 years no cost extension).
 (\$495,000). Role: PI
- 6. National Institutes of Health Clinical Loan Repayment Program. Funded. 2006-2008. Role: Pl
- 7. National Heart, Lung, and Blood Institute. Grant # R01 HL085497-01A1. Genetics of In Vivo and In Vitro Endothelial Function in African Americans. 8/25/2007-5/31/2013. Funded (\$3,305,550). Role: PI
- 8. National Institutes of Health/NHLBI Predoctoral Training Grant (T32). 1 T32 HL091804-01A01. *Integrative Cardiovascular Pathophysiology*. Steve Houser (PI), Funded (\$950,358). 07/09-06/14. Role: Faculty.
- 9. National Institutes of Health/NHLBI Minority Research Supplement (GRS). Supplement to R01 HL085497-01A1 (PI-M. Brown) 3RO1HL085497-03S1. 7/1/09-5/31/12. Interrelationship between AT1R gene variants and the vascular circadian clock in the regulation of circadian blood pressure patterns in African Americans. Funded. (\$173,661). Role: PI
- 10. **American Heart Association** Predoctoral Fellowship, Boa Kim (PI), 2012 2014 *Effects of Laminar Shear Stress on Mitochondrial DNA Integrity in Endothelial Cells.* **Funded. Role:** Co-Sponsor
- 11. **NIH/NHLBI (T32)** Training in CVD Epidemiology & Related Chronic Diseases in Minority Populations. Martha Diviglus, MD, PhD (PI). Status: **Funded** \$262,290. **Role:** Faculty
- 12. **National Institutes of Health/NHLBI (R01)**. Exercise Training Approaches to Restore Endothelial Function in Obese African Americans. Shane Phillips (PI). Status: **Funded. Role:** Co-I, Percent Effort (10%)
- 13. **National Institutes of Health/NHLBI (R01)**. Optimized Therapy for Vascular Inflammation in African Americans. \$1,930,000. Status: **Not funded. Role:** (PI) Percent effort (20%)
- 14. **National Institutes of Health (R56).** Grant # 1R56HL126657-01A1. A Hypertension Emergency Department Intervention Aimed at Decreasing Disparities (AHEAD2). Heather Prendergast, MD (PI) \$1,804,934. Status: **Funded**. **Role:** Co-I (12%)
- 15. **National Institutes of Health Common Fund (U01)**. University of Illinois Molecular Transducers of Physical Activity Adult Clinical Center. Jeffrey Woods (Co-PI). Status: **Not funded**. **Role:** Co-PI
- 16. **National Institutes of Health (R21).** The Macrovascular and Microvascular Profile of Patients with Diabetes. Houry Puzantian (PI). Status: **Submitted. Role:** Consultant
- 17. **National Institutes of Health (K12).** Deep South Mentored Career Development in Patient Centered Outcomes Research. Richard Hansen (PI). Status: **Submitted**. **Role:** Primary Mentor
- 18. **National Institutes of Health (R01).** A Novel Primary Prevention of Hypertension Strategy. Michael Brown (PI). Status: **Submitted**

Internal

- 1. **General Research Board, University of Maryland, Summer Research Grant**. Effects of Acute and Chronic Exercise on Nitric Oxide Production. Pl. **Funded** (\$10,000).
- 2. **Veterans Affairs Merit Grant Type II**, Grant 121F, **Co-investigator**, Effects of Exercise on Endothelial Function in Stroke Patients. 4/1/01-3/31/04, Co-I. **Funded.** (\$355,000).
- 3. **Seed Grant, Temple University.** The Relationship Between Periodontitis, Hypertension and Immune/Inflammatory Dysfunction in African Americans. Co-Pl. **Funded** (\$50,000).

- 4. **Temple University** *Interdisciplinary Community Based Participatory Research in Stress and Wellness.* Co-PI. Funded (\$12,000).
- 5. Campus Research Board Pilot Grant. Optimizing Vascular Health in African Americans. Pl. Funded (\$20,000)
- 6. **Presidential Award for Interdisciplinary Research**. Cognitive and Vascular Aging. Col. **Submitted**
- 7. **Presidential Award for Interdisciplinary Research**. Factors Contributing to Childhood Obesity Disparities in Alabama. Co-I. **Submitted**

Reviewing Grants, Manuscripts, and Books

Grants

Department of Veterans Affairs Merit Grant. Endothelial Dysfunction in Type 2 Diabetes: Effects on Exercise capacity.

Study Section: NIH, National Institute of General Medical Sciences, MBRS Review Panel. October 5, 2001.

Study Section: NIH Center for Scientific Review Special Emphasis Panel, ZRG1 SS-C (29) Minority/Disability Predoctoral Fellowships-DCPS. July 27-28, 2002.

Study Section: NIH, National Institute of General Medical Sciences, MBRS Review Panel. February 3-4 5, 2003.

NIH Center for Scientific Review Special Emphasis Panel, ZRG1 SSS-C (29) Minority/Disability Predoctoral Fellowships-DCPS. August, 2003.

Pennsylvania Department of Health Interim Panel Review Board. December 7-9, 2004. Purpose was to review progress and make recommendation for improvement for two 5 million dollar State funded grants.

NIH Center for Scientific Review Special Emphasis Panel, Predoctoral Fellowships. March, 2005.

Minnesota Partnership for Biotechnology and Medical Genomics, 2007

American Heart Association, Region1, Vascular Biology and Blood Pressure Review Committee, April 2008.

University of Maryland Claude D. Pepper Older Americans Independence Center and Maryland Exercise and Robotics Center of Excellence, Pilot Research Projects, May, 2008.

NIH/National Heart, Lung, and Blood Institute Patient Oriented Research Career Enhancement Award Review Group, 2007-2011.

NIH/Neurological, Aging, and Musculoskeletal Epidemiology Study Section, 2008.

American Heart Association, Region1, Vascular Biology and Blood Pressure Review Committee, April 2009-present.

Maryland Industrial Partnerships, Maryland Technology Enterprise Institute (MTECH), University of Maryland. These grants are to fund industry-university partnerships, November 2009.

NIH/Motor Function, Speech and Rehabilitation Study Section (MFSR) Study Section, 2012, Ad hoc reviewer.

NIH/Motor Function, Speech and Rehabilitation Study Section (MFSR) Study Section, 2012, Regular member. October 2013-October 2019.

Journals

Manuscript Reviewer:

Diabetes Care

Journal of Applied Physiology

Journal of the American Geriatrics Society

Journal of the Southern Medical Association

Medicine & Science in Sports & Exercise

International Journal of Sports Medicine

Journal of Human Hypertension

Kidney International

Maturitas

Vascular Medicine

American Heart Journal

Vascular Health and Risk Management

Journal of Translational Medicine

Editorial Boards

Exercise and Sports Science Reviews (January 2013-December 2016) World Journal of Hypertension (January 2016-December 2019)

Translational Journal of the American College of Sports Medicine January 2017-December 2020

Books

Exercise and Disease Management: A Manual for Health Care Teams and Their Patients. G & B Editorial Services, Inc., Provided editorial function.

Other Scholarly Activities

Chapters in Books

RD Dibner, MM Shubin, N Taylor-Tolbert, DR Dengel, SD McCole, **MD Brown**, JM Hagberg. 1996. *Effect of Exercise Training and Acute Exercise on Essential Hypertensives*. In VA Rogozkin and R Maughn (Ed.), Current Research in Sports Sciences; An International Perspective. (pp.295-301). New York, NY: Plenum Press.

MD Brown and J-Y Park. 2015. Effects of In Vitro Laminar Shear Stress as an Exercise Mimetic on endothelial Cells. Pescatello, LS (Ed.), In Effects of Exercise on Hypertension: From Cells to Physiological Systems. (pp.157-184). New York, NY Humana Press.

Proceedings from National Meetings

RM Dibner, MM Shubin, N Taylor-Tolbert, SD McCole, DR Dengel, **MD Brown**, JM Hagberg. Effect of exercise training and acute exercise on essential hypertensives. *Proceedings of the 1994 Goodwill Games Scientific Meetings.* 1994.

Invention Disclosures Filed

Genetic Markers Which Identify Individuals Who Decrease Their Blood Pressure Through Exercise. Inventors: JM Hagberg, **MD Brown**, RE Ferrell. 1999.

ACE Gene Polymorphism and Exercise Training-Induced Changes In Sodium Excretion In African Americans. Inventors: **MD Brown**, JM Hagberg, RE Ferrell. 2000.

The Roles of ACE and eNOS Gene Polymorphisms On Blood Pressure Sensitivity To Sodium In Older Hypertensives. Inventors: **MD Brown**, MA Supiano, RE Ferrell, DR Dengel. 2000.

A Self-Contained System for Applying Fluid Shear Stress to Cultured Cells. Inventors: **MD Brown** and J Kretzschmar. 2013.

Patents

US patent # 6,399,306. Genetic Markers Which Identify Individuals Who Decrease Their Blood Pressure Through Exercise. 2002.

US patent # 6,743,587. ACE Genotype which Correlates with Improved Success in Sodium Excretion in Hypertensives with Exercise. 2004.

Option Agreements

BodyMedia, Inc. bought an exclusive option to all gene marker technologies produced by a group of investigators.

Memoranda of Understanding

Johns Hopkins University, Meyerhoff IBD Genetics Laboratory having a shared interest in investigating the activation of NFKB1 (p50/p105) – Promoter Interactive Protein in Human Umbilical Vein Endothelial Cells, and the association of NFKB1 -96 ATTG insertion/deletion polymorphism with shear stress-induced NFKB1 promoter activation in Human Umbilical Vein Endothelial Cells.