CURRICULUM VITAE Joon Young Park, Ph.D.

I. PERSONAL INFORMATION

A. Demographics

Joon Young Park
Associate Professor
Department of Kinesiology
Temple University
215-204-1957 (Main)
215-717-9461 (HSC)
Fax: 215-204-4414
Email: parkjy@temple.edu
265 Pearson Hall, 1800 N. Broad Street
Philadelphia, PA 19122

B. Education

2002-2006	Ph.D.	University of Maryland, College Park, MD Dissertation: NFKB1 gene polymorphism and unidirectional laminar shear stress: Implications for NF-kB activation, eNOS protein expression and endothelial function
1996-1998	M.S.	Seoul National University, Seoul, Korea Thesis: Exercise-induced acute phase response in T lymphocyte and natural killer cell: Effects of antioxidant supplementation
1991-1996	B.S.	Seoul National University, Seoul, Korea

C. Postdoctoral Training

2006-2009	National Heart, Lung, and Blood Institute, NIH	
	Translational Medicine Branch, Molecular Biology Section, Bethesda, MD	

D. Areas of Specialty Translational Exercise Biology, Endothelial Cell Biology, Muscle Physiology, Mitochondrial Biology

E. Professional Appointments

2015-present	Associate Professor (tenured), Department of Kinesiology, College of Public
_	Health, Temple University, Philadelphia, PA
2013-present	Associate Professor (secondary), Cardiovascular Research Center, Lewis Katz
_	School of Medicine, Temple University, Philadelphia, PA
2009-2015	Assistant Professor, Department of Kinesiology, College of Health
	Professions and Social Work, Temple University, Philadelphia, PA
2009-present	Director, Cardiovascular Genomics Laboratory, Department of Kinesiology,
_	Temple University, Philadelphia, PA

2006-2009	Research Fellow, National Heart, Lung, and Blood Institute, National
	Institutes of Health, Bethesda, MD
2004-2006	<u>University Fellow</u> , University of Maryland, College Park, MD
	Under AHA Predoctoral Fellowship
	Department of Cardiology, Emory University Medical School, Atlanta, GA
	Department of Biochemistry and Molecular Biology, University of Maryland
	School of Medicine, Baltimore, MD
	Molecular Therapeutic Unit, National Institute of Neurological Disorders and
	Stroke, NIH, Bethesda, MD
2002-2004	Research Assistant, University of Maryland, College Park, MD
2002-2003	Teaching Assistant, University of Maryland, College Park, MD
1998-2002	Research Associate, Department of Immunology/Cell Biology, Asan Institute
	of Life Science, Seoul, Korea
1997-1998	Research Technician, Department of Immunology/Cell Biology, Asan
	Institute of Life Science, Seoul, Korea
1995-1997	Clinical Exercise Specialist, Department of Sports and Health Medicine, Asan
	Medical Center, Seoul, Korea

F. Grant Review Panel

2013-Present American Heart Association (Vascular Biology Section)

G. Editorial Board Member

Exercise and Sport Sciences Reviews
Clinical Science (Editorial Advisory Panel)
Journal of Exercise Rehabilitation
Kinesiology Journal, Korean Academy of Kinesiology
Integrative Medicine Research
Asian Journal of Kinesiology

H. Journal Reviewer

Medicine and Science in Sports and Exercise, American College of Sports Medicine; Journal of Gerontology: Medical Sciences, The Gerontological Society of America; Journal of Applied Physiology, American Physiological Society; Journal of Thrombosis and Haemostasis, International Society on Thrombosis and Haemostasis; American Journal of Physiology Heart and Circulatory Physiology, American Physiological Society; American Journal of Physiology Regulatory, Integrative and Comprehensive Physiology, American Physiological Society; Cardiovascular Research, European Society of Cardiology; PlosOne; American Journal of Pathology, Scientific Report, Oncotarget, Circulation Research, Journal of Physiology etc.

I. Honors and Awards

2018	Appointed as the "Fast-track reviewer" by the editor-in-chief of Cardiovascular
	Research Journal (IP: 6.29 as of 2018)
2012	"Certificate of Research Excellence" in recognition of outstanding dedication
	and achievement in heart disease and stroke research, Great Rivers Affiliate,
	American Heart Association

2012	"Scientist Development Award", National Center, American Heart Association
2011	"Professional Member", American Heart Association
2010	"Board Member", Korean US Applied Physiology Society
2009	"Professional Member", American Physiological Society
2009	"Member of the Korean Best Scientists", The Biological Research Information
	Center, Korean Science and Engineering Foundation
2004	"Pre-Doctoral Fellowship Award", American Heart Association
2004	"University Fellowship", Graduate School, University of Maryland, College
	Park, MD
1991-1995	"Scholarship Award", College of Education, Seoul National University, Seoul,
	Korea

J. Professional Affiliations

American Heart Association American Physiological Society North American Vascular Biology Organization American College of Sports Medicine

II. RESEARCH SUPPORT

A. Active Research Support

NIH R01HL126952 2015-2020

Title: Functional Implications of Fluid Shear Stress-Induced Mitochondrial Remodeling

Role: PI

The goal of this project is to determine the functional effects of targeted endothelial mitochondrial remodeling on vascular dysfunction and hypertension

NIH R01NS102157 2017-2022

Title: Behavioral- and Bio-markers of subconcussion with controlled human head impact

Role: PI (MPI, Park and Jeka)

The overall goals of this project are to assess the short-term consequences of mild mechanical impact. We seek to introduce novel behavioral and biochemical markers of brain injury and repair caused by mild mechanical stress.

NIH R01HL133248 2016-2021

Title: Mechanism of Hypertensive Vascular Remodeling and End-Organ Damage

Role: Co-I (PI, Eguchi)

The overall goals of this project are to test the hypothesis that activation of membrane receptor signal transduction leading to enhanced vascular remodeling and end-organ damage in animal models of hypertension to seek alternative treatments against hypertensive complications.

NIH R01HL129120 2016-2021*

Title: Follistatin-like protein 1 in cardiac and systemic metabolism

Role: Co-I (PI, Recchia and Walsh)

The overall goals of this project are to test the hypothesis that the relative production of Fstl1 by heart and skeletal muscle varies in response to physiological and pathological conditions and contributes to the regulation of cardiac and systemic energy metabolism.

*EFFORT ON PROJECT FOR YEARS 2 AND 3 ONLY

B. Pending Research Support

NIH R61 HL138667 Under Revision Feb, 2018

Title: Reducing Cardiovascular Disease Risk among Low-Income, Inactive Smokers: A Multimodal

Multi-Health Behavior Intervention

Role: Co-I (PI, Collins)

The goal of this study is to reduce cardiovascular disease (CVD) risk in a highly vulnerable population - physically inactive smokers living in low-income communities.

AHA Postdoctoral Fellowship Grant

July 2018

Title: PHD2-dependent regulation of physiological angiogenesis in skeletal muscle

Role: Sponsor

The objective of this proposed study is, therefore, to determine the role of muscle PHD2 in endothelial mitochondrial adaptations under flow conditions, and to test the working hypothesis that the improved mitochondrial integrity within endothelial cells will promote the induction of physiological angiogenesis in adult skeletal muscle.

AHA Predoctoral Fellowship Grant

July 2018

Title: Effect of laminar shear stress on cell-free mtDNA-induced endothelial cell activation

Role: Sponsor

The objective of this proposed study is to investigate effects of laminar shear stress and exercise on circulating cf-mtDNA-mediated endothelial activation.

C. Completed Research Support

AHA SDG 12070327 2012-2016

Title: Flow Shear Stress-Induced Mitochondrial Biogenesis in Endothelial Cells

Role: PI

The goal of this project is to determine the molecular mechanism whereby high flow induces mitochondrial biogenesis in vascular endothelial cells.

PRE11960049, American Heart Association

2012-2014

Title: Effects of Laminar Shear Stress on Mitochondrial DNA Integrity in Endothelial Cells

Role: Sponsor

PATS 290119, Pennsylvania Athletic Trainer Society

2015-2016

Title: Effect of subconcussive head impact on blood-brain barrier derived microparticle

Role: Sponsor

PRE041544U, American Heart Association

2004-2006

Title: Functional Analysis of NFKB1 Gene Variation in Hypertensives: Exercise Training Intervention and Human Endothelial Cell Shear Studies

The goal of this project was to investigate how NFKB1 I/D polymorphism affects vascular adaptations to exercise training in hypertensive individuals by conducting an in vivo exercise intervention and an in vitro laminar shear stress study on Human Umbilical Vein Endothelial Cells.

Role: PI

III.PUBLICATIONS

A. Peer-Reviewed Articles

- 1. Lee HJ, Kim KJ, Kim B, Shin JC, Rajan S, Chen X, Brown MD, Lee SH, Park JY, A cellular mechanism of muscle memory facilitates mitochondrial remodeling following resistance training, *Journal of Physiology*. 2018 (Accepted)
- 2. Huihong Zheng, Gayani Kanchana Nanayakkara, Ying Shao, Hangfei Fu, Yu Sun, Ramon Cueto, William Y Yang, Qian Yang, Haitao Shen, Wu Na, LuQiao Wang, Wuping Yang, Hongping Chen, Lijian Shao, Jianxin Sun, Xuebin Qin, Park JY, Konstantinos Drosatos, Eric T Choi, Qingxian Zhu, Hong Wang, Xiao-feng Yang, DNA Checkpoint and Repair Factors are Nuclear Sensors for Intracellular Organelle Stresses Inflammations and Cancers Can Have High Genomic Risks, Frontiers in Physiology, 2018 May 11:9:516. doi: 10.3389/fphys.2018.00516. 2018
- 3. Cheng Z, Shen X, Jiang X, Shan H, Cimini M, Fang P, Ji Y, Park JY, Drosatos K, Yang X, Kevil CG, Kishore R, Wang H. Hyperhomocysteinemia potentiates diabetes-impaired EDHF-induced vascular relaxation: Role of insufficient hydrogen sulfide. *Redox Biol.* 16:215-225, 2018
- 4. Seki M, Powers JC, Maruyama S, Zuriaga H, Wu CL, Kim L, Johnson J Poidomani A, Munoz E, Rajan S, Park JY, Walsh K, Recchia FA, Acute and chronic increase of circulating follistatin-like protein 1 enhance cardiac and systemic fatty acid oxidation in pacing-induced heart failure, *Circulation: Heart Failure*. 11(1): e004486, 2018
- 5. Shao Y, Nanayakkara G, Cheng J, Cueto R, Yang WY, Park JY, Wang H, Yang X., Lysophospholipids and their receptors serve as conditional DAMPs and DAMP receptors in tissue oxidative and inflammatory injury, *Antioxidants & Redox Signaling*, doi: 10.1089/ars.2017.7069., 2018
- 6. Kim JS, Kim B, Lee H, Thakka S, Babbitt, DM, Rizzo V, Brown MD, Park JY, Exercise attenuates endothelial activation and apoptosis through shear stress-induced mitochondrial biogenesis, *American Journal of Physiology-Heart and Circulatory Physiology*, 309(3):H425-433, 2015
- 7. Babbitt DM, Kim JS, Forrester SJ, Brown MD, Park JY, Effects of interleukin-10 and laminar shear stress on Endothelial Nitric Oxide Synthase and Nitric Oxide in African American Human Umbilical Vein Endothelial Cells, *Ethnicity and Health*, 25(4):413-418, 2015
- 8. Takayahaqi T, Kawai T, Forrester SJ, Obama T, Tsuji T, Fukuda Y, Elliott KJ, Tilley DG, Davisson RL, Park JY, Eguchi S, Role of epidermal growth factor receptor and endoplasmic reticulum stress in vascular remodeling induced by angiotensin II, *Hypertension*, 65(6):1349-55, 2015
- 9. Kim B, Lee HJ, Kawata K, Park JY, Exercise-mediated wall shear stress increases mitochondrial biogenesis in vascular endothelium, *PLoS One*, 6;9(11):e111409, 2014
- 10. Forrester S, Kawata K, Lee HJ, Kim JS, Sebzda K, Yingling VR, Park JY, Bioinformatic Identification of CTGF as an Osteogenic Protein within Skeletal Muscle, *Physiology Reports*, 2(12). pii: e12255, 2014

- 11. Kim B, Kim JS, Yoon YS, Santiago M, Brown MD, Park JY, Inhibition of Drp1-Dependent Mitochondrial Division Impairs Myogenic Differentiation, *American Journal of Physiology: Regulatory Integrative and Comparative Physiology*, 2013 Oct, 305(8):R927-938.
- 12. Wang PY, Ma W, Park JY, Celi FS, Arena R, Choi JW, Ali QA, Tripodi DJ, Zhuang J, Lago CU, Strong LC, Talagala SL, Balaban RS, Kang JG, Hwang PM, Increase in Oxidative Metabolism Li-Fraumeni Syndrome, *New England Journal of Medicine*, 2013 Mar, 368(11):1027-1032.
- 13. Brown MD, Feairheller DL, Thakkar S, Veerabhadrappa P, Park JY, Racial differences in tumor necrosis factor-α-induced endothelial microparticles and interleukin-6 production, *Vascular Health and Risk Management*, 2011 Aug; 7:541-550.
- 14. Feairheller DL, Park JY, RizzoV, Kim B, Brown MD, Racial differences in the response to shear stress in human umbilical vein endothelial cells, *Vascular Health and Risk Management*, 2011 Jul; 7:1-7.
- 15. Feairheller DL, Park JY, Sturgeon KM, Williamson ST, Diaz KM, Veerabhadrappa P, Brown MD, Racial differences in oxidative stress and inflammation: in vitro and in vivo, *Clinical Translational Science*. 2011 Feb;4(1):32-7.
- 16. Zago AS, Kokubun E, Fenty-Stewart NM, Park JY, Attipoe S, Hagberg JM, and Brown MD, Effect of physical activity and t-786C polymorphism in blood pressure and blood flow in the elderly, *Arquivos Brasileiros de Cardiologia*, 2010 Oct; 95(4):510-6.
- 17. Zago AS, Park JY, Fenty-Stewart NM, Kokubun E and Brown MD, Effects of aerobic exercise on the blood pressure, oxidative stress and eNOS gene polymorphism in pre-hypertensive older people, *European Journal of Applied Physiology*, 2010 Jul, 110(4): 825-832.
- 18. Park JY, Wang PY, Matsumoto T, Sung, HJ, Ma WZ, Choi J, Anderson SA, Leary SC, Balaban RS, Kang, JG, Hwang, PM, p53 improves aerobic exercise capacity and augments skeletal muscle mitochondrial DNA content, *Circulation Research* 2009, 25;105(7):705-12.
- 19. Brinkley T, Fenty-Stewart N, Park JY, Brown MD, Hagberg JM, Plasma Nitrate/Nitrite Levels are Unchanged after Long-Term Aerobic Exercise Training in Older Adults, *Nitric Oxide: Biology and Chemistry* 2009, 21(3-4): 234-238.
- 20. Fenty-Stewart N, Park JY, Basu S, Hagberg JM, Ferrell RE, Brown MD, Independent & combined influence of AGTR1 variants and aerobic exercise on oxidative stress in hypertensives, *Blood Pressure*, 2009, 18(4):204-212.
- 21. Feairheller DL, Brown MD, Park JY, Brinkley T, Basu S, Hagberg JM, Ferrell RE, Fenty-Stewart NM. Exercise training, NADPH oxidase p22phox gene polymorphisms, and hypertension. *Medicine and Science in Sports and Exercise* 2009, 41(7): 1421-1428.
- 22. Attipoe S, Park JY, Fenty N, Phares D, Brown MD, Oxidative Stress Levels are Reduced in Postmenopausal Women with Exercise Training Regardless of Hormone Replacement Therapy Status, *Journal of Women & Aging*, 2008, 20:31-45.
- 23. Park JY, Farrance IK, Fenty NM, Hagberg JM, Roth SM, Mosser DM, Wang MQ, Jo HJ, Okazaki T, Brant SR, Brown MD, NFKB1 promoter variation implicates shear-induced eNOS gene expression

- and endothelial function in pre and stage I hypertensives, *American Journal of Physiology-Heart and Circulatory Physiology*, 2007, 293(4):H2320-H2327.
- 24. Ma W, Sung HJ, Park JY, Matoba S, Hwang PM, A pivotal role for p53: balancing aerobic respiration and glycolysis, *J Bioenerg Biomembr*, 2007 Jun;39(3):243-6.
- 25. Jones JM, Dowling T, Park JJ, Phares DA, Park JY, Obisesan T, Brown MD, Differential Aerobic Exercise-Induced Changes in Plasma Aldosterone between African American and White Prehypertensives & Hypertensives May Be Dependent on Baseline Plasma Aldosterone Levels, *Experimental Physiology*, 2007, 92(5):871-9.
- 26. Jones JM, Park JJ, Dowling T, Phares DA, Park JY, Brown MD, Role of potassium excretion and percent body fat on ethnic differences in plasma aldosterone levels, *Ethnicity & Disease* 2006;16(3 Suppl 4):S4-10-4.
- 27. Park JY, Ferrell RE, Park JJ, Hagberg JM, Phares DA, Jones JM, Brown MD, NADPH Oxidase p22phox Gene Variants are Associated with Systemic Oxidative Stress Biomarker Responses to Exercise Training, *Journal of Applied Physiology*, 2005, 99: 1905-1911.
- 28. Weiss EP, Park JJ, McKenzie JA, Park JY, Kulaputana O, Brown MD, Dana A. Phares, and Jim M. Hagberg. Plasma Nitrate/Nitrite Response to an Oral Glucose Load and the Effect of Endurance Training, *Metabolism*, 2004, 53(5):673-9.
- 29. Jin YS, Park JY, Kim HY, Lee HJ, Kim YG, Kim MJ, The effect of Aerobic and Qi-Gong on Lymphocyte, β-adrenergic receptor, antioxidative function, and heart rate variability in the elderly, *Korean J of Sports Medicine*, 2001, 19(2), 359-373.
- 30. Jin YS, Lee WR, Park JY, The Effect of antioxidants supplementation on antioxidant enzyme activity of skeletal muscle immediately after maximal exercise in rats, *Korean J of Sports Medicine*, 2001, 19(1), 148-159.
- 31. Jin YS, Park KK, Park JY, Kim MJ, Lee WR, Kim HY, Lee HJ, Park EK, Effects of exercise-induced oxidative stress and antioxidant supplementation on NF-κB activation in peripheral mononuclear cells, *Korean J of Sports Medicine*, 2000, 18(2), 261-270.
- 32. Jin YS, Kim YK, Park EK, Choi HJ, Park JY, The effects of long term stretching Exercise on Health Related Fitness of the Elderly Women, *Korea Exercise Science Academy*, 2000 April, 1-13.
- 33. Kim JE, Kim YK, Lee HJ, Park EK, Park JY, Jin YS, Han KS, The Correlation between isokinetic flexion-extension force of each joint and throwing speed in the softball pitcher, *Korean J. Sports Medicine*, 2000, 18(1): 33-40.
- 34. Jin YS, Kim MJ, Park JY, Kim YK, Lee HJ, The Effect Of Exercise Pattern And Antioxidant Supplement On Antioxidant Enzymes And Total Antioxidant Status, *Korean J of Physical Education*, 1999, 38(4):451-460.
- 35. Lee HJ, Kim JE, Park JY, Kim YK, Jin YS, Correlation analysis of muscular fatigue and torque during repeated isokinetic shoulder internal and external rotation, *Korean J. of Sports Medicine*, 1999, 17(2); 376-384.

- 36. Park JY, Kim MJ, Jung ST, Jun TW, Kweon OS, Jin YS, The Effect of Antioxidant Vitamins Supplementation on Exercise-Induced Acute Phase Response of T Lymphocyte and Natural Killer Cell, *Korean J of Physical Education*, 1998, 37(4): 380-389.
- 37. Jin YS, Kim MJ, Park JY, The Effects of Exercise Pattern on acute response of T lymphocyte and Natural Killer cell: to search a immunological threshold around AT level, *Korean J. of Sports Medicine*, 1998, 16(2):259-269.
- 38. Jin YS, Ryu HS, Park JY, The Changes of Blood Total Antioxidant and MDA Concentration with Different Exercise Intensities, *Korean J. of Sports Medicine*, 1998, 16(2):252-258.
- 39. Jin YS, Park JY, TW Kim, Kim MH, Kim YK, Lee HJ, Han KS, The Validity of Anaerobic Capacity and Fatigue Index of Wingate Test, *Korean J. of Sports Medicine*, 1998, 16(1): 97-106.
- 40. Jin YS, Kim YK, Kim JH, Park JY, The Effects of Exercise and Diet on patterns of Body Fat Distribution, *Korean J. of Sports Medicine*, 1998, 16(1): 67-76.
- 41. Kim YK, Jin YS, Kim MH, Lee HJ, Namkung YR, Park JY, Bae YJ, Lee H, The Effect of Exercise Training and Low Calory Diet on Weight Loss and Body Fat Distribution in Obese Women, *Korean J of Physical Education*, 1997, 36(3)114-122.
- 42. Jin YS, Kim YK, Kim JH, Kim MH, Lee HJ, Namkung YR, Park JY, The Correlation between Throwing Speed and Shoulder Internal/External Rotators & Trunk Flexion/Extension in the Professional Baseball Pitchers, *Korean J. of Sports Medicine*.1997, 15(1)58-66.
- 43. Jin YS, Kim MH, Kim JH, Jun MK, Park JY, The comparisons of peak isokinetic functions of Knee Joint between Normal and PFPS patient, *Korean J. of Sports Medicine*, 1995, 13(2)114-123.

C. Research Presentations and Proceedings

- Soon-Gook Hong, Malik Sylla, Junchul Shin, Jamie Seo, Jacqueline Sayoc, Soo-Young Choi, and Joon-Young Park, Quantitative Analysis of Mitochondrial Morphology Under Different Fluid Shear Stress Conditions, Medicine & Science in Sports & Exercise. 50(5S):32–33, MAY 2018, American College of Sports Medicine, Minneapolis, MN, 2018
- 2. Kokkinaki, D, Hoffman, M, Kalliora, C, Shanmughapriya, S, Kyriazis, I, Tomar, D, Park, JY, Wang, H, Yang, XF, Muniswamy, M, Christofidou-Solomidou, M, Drosatos, K., The antioxidant LGM2605 improves mitochondrial function and alleviates septic cardiac dysfunction, Shock Society, Scottsdale, AZ, 2018
- 3. Eric R. Munoz, Boa Kim, Mitsuru Seki, Jeff Powers, Hojun Lee, Kenneth Walsh, Fabio Recchia, Park JY, Myokine/Cardiokine Follistatin-like Protein 1 Promotes Oxidative MyHC Expression and Mitochondrial Function in Myogenic Cells, *American College of Sports Medicine*, Denver, CO, 2017
- 4. Eric R. Muñoz, Hojun Lee, Boa Kim, David Roul, Fabio Recchia, Park JY, Effects of Follistatin-like Protein 1 on Myogenic Differentiation and Mitochondrial Respiration in Canine Myoblasts, *Mid-Atlantic ACSM Regional Chapter Annual Meeting*, Harrisburg, PA, 2016

- 5. Park JY,* Boa Kim, Brittany Wilson, and Michael Brown, Effects of Physiological Oxygen Tension on In Vitro Fluid Shear Stress-Induced endothelial NO Synthase Activation, *American College of Sports Medicine*, Boston, MA, 2016
- 6. Keisuke Kawata, Thomas Sim, Jong-Hyun Lee, Masahiro Takahagi, Victor Szwanki, Al Bellamy, Bianca Cotto, Soroush Assari, Cory Keller, Park JY, Ryan Tierney, and Dianne Langford, Protect the player, protect the game: tracking cumulative brain injury in collegiate athletes, 11th World Congress on Brain Injury, Hague, Netherlands, March 2016
- 7. Brittany Wilson, Park JY,* Autophagy in Hypertension: Friend or Foe?, *Temple University CPH Research Day*, Philadelphia, PA, 2016
- 8. Sarah Ostroski, Park JY,* Exercise Training Protocol for the Canine Research Model, *Temple University CPH Research Day*, Philadelphia, PA, 2016
- 9. Hojun Lee, Park JY,* A Novel Cellular Mechanism for Accelerated Acquisition of Muscle Mass and Mitochondrial Function in Pre-Trained Rats, *Temple University CPH Research Day*, Philadelphia, PA, 2016
- 10. Keisuke Kawata, Ryan Tierney, Hojun Lee, Jacqueline Phillips, Ji-Seok Kim, John Jeka, and Park JY,* Effects of repetitive subconcussive head impacts on oculomotor function and blood-brain barrier-derived biomarker signature, *Temple University CPH Research Day*, Philadelphia, PA, 2015
- 11. Rebecca Fox, Hojun Lee, David Roul, Gino Grifoni, Fabio Recchia and Park JY,* Effects of Follistatin-like Protein 1 on Myotube Differentiation and Myofiber Type Switch in C2C12 & Primarily Cultured Myoblasts, *Temple University CPH Research Day*, Philadelphia, PA, 2015
- 12. Brittany Wilson, Steven Forrester, Keisuke Kawata, Boa Kim, and Park JY,* Effects of Voluntary Exercise Preconditioning on AngII-induced Cardiovascular Pathophysiology in the Mouse, *Experimental Biology*, Boston, MA 2015
- 13. Dianne M Babbitt, Ji-Seok Kim, Steven J Forrester, Michael D Brown and Park JY,* Effect of Interleukin-10 and Laminar Shear Stress on African American Human Umbilical Vein Endothelial Cells, *Experimental Biology*, Boston, MA 2015
- 14. Boa Kim, Brittany Wilson, Steven Forrester, Ji-Seok Kim, Keisuke Kawata, Hojun Lee, Mayra Santiago, Michael Brown, Satoru Eguchi, and Park JY,* Exercise-mediated wall shear stress induces mitochondrial remodeling and prevents angiotensin II-induced high blood pressure, *AHA Scientific Session*, Chicago, IL, 2014
- 15. Sungjae Hwang, Keisuke Kawata, Lei Ma, Hojun Lee, Lori B. Moore, Peter Agada, Elizabeth D. Thompson, Evgeny Kryneskiy, Park JY, Ryan Tierney, John J. Jeka, Vestibular-Cognitive-Postural Effects and A Biomarker Signature from Sub-Concussive Head Impact, *Neuroscience meeting: Society of Neuroscience*, Washington DC, 2014
- 16. Ji-Seok Kim, Boa Kim, Hojun Lee, Sunny Thakkar, Dianne Babbitt, Satoru Eguchi, Michael Brown, Park JY,* Shear Stress-induced Mitochondrial Biogenesis: Implications for Salutary Effects of Aerobic Exercise on Endothelial Homeostasis, *AHA-High Blood Pressure Research*, San Francisco, CA, 2014

- 17. Katherine J. Elliott, Toshiyuki Tsuji, Takashi Obama, Takehiko Takayanagi, Steven Forrester, Park JY, and Satoru Eguchi, EGF receptor and ER stress mediate end-organ damage but not hypertension induced by angiotensin II in mice, *AHA-High Blood Pressure Research*, San Francisco, CA, 2014
- 18. Ji-Seok Kim, Boa Kim, Hojun Lee, Brittany E. Wilson, Keisuke Kawata, Steven J. Forrester, and Park JY,* Effect of Fluid Shear Stress on H₂O₂-induced Senescence in Endothelial Cells, *American College of Sports Medicine*, Orlando, FL, *Medicine and Science in Sports and Exercise*, 46 (5S): 743-753, 2014
- 19. Hojun Lee and Park JY,* Downregulation of NCoR1 Gene Expression Level and Its Nuclear Translocalization during C2C12 Myotube Differentiation, *American College of Sports Medicine*, Orlando, FL, *Medicine and Science in Sports and Exercise*, 46 (5S): 638-642, 2014
- 20. Steven Forrester, Kelly Sebzda, Hojun Lee, Keisuke Kawata, Ji-Seok Kim, Vanessa R. Yingling and Park JY,* Bioinformatic Identification of CTGF as an Osteogenic Protein Expressed within Human Skeletal Muscle, *American College of Sports Medicine*, Orlando, FL, *Medicine and Science in Sports and Exercise*, 46 (5S): 34-50, 2014
- 21. Keisuke Kawata, Hojun Lee, Boa Kim, Ji-Seok Kim, Steven Forrester, and Park JY,* Effects of Voluntary Running Exercise on mtDNA Copy Number and Mitochondrial Biogenesis in Brain, *American College of Sports Medicine*, Orlando, FL, *Medicine and Science in Sports and Exercise*, 46 (5S): 677-682, 2014
- 22. Brittany Wilson, Boa Kim, Ji-Seok Kim, Hojun Lee, Keisuke Kawata, Steven Forrester and Park JY,* The Effect of Voluntary Wheel Running on Mitochondrial Autophagy Markers in Mouse Cardiac Tissue, *Temple University CHPSW Research Day*, Philadelphia, PA, 2014
- 23. Ji-Seok Kim, Boa Kim, Hojun Lee, Sunny Thakkar, Dianne M. Babbitt, Michael D. Brown, and Park JY,* Aerobic Exercise Attenuates Endothelial Activation and Apoptosis Through Shear Stress-Induced Mitochondrial Biogenesis, *Temple University CHPSW Research Day*, Philadelphia, PA, 2014
- 24. Hojun Lee, Keisuke Kawata, Ji-Seok Kim, Boa Kim, Sukho Lee and Park JY,* A cellular memory mechanism facilitates re-acquisition of mitochondrial function and muscle mass after intervening period of inactivity, *Temple University CHPSW Research Day*, Philadelphia, PA, 2014
- 25. Keisuke Kawata, Hojun Lee, Boa Kim, Ji-Seok Kim, Steven J. Forrester, and Park JY,* Aerobic exercise improves mitochondrial respiratory chain enzyme activities in mouse brain, *Temple University CHPSW Research Day*, Philadelphia, PA, 2014
- 26. Steven Forrester, Hojun Lee, Keisuke Kawata, Ji-Seok Kim, Boa Kim and Park JY,* Bioinformatic Identification of CTGF as an Osteogenic Protein Expressed within Skeletal Muscle, *Temple University CHPSW Research Day*, Philadelphia, PA, 2014
- 27. Ji-Seok Kim, Hojun Lee, Boa Kim, Brittany Wilson, Keisuke Kawata, Sunny Thakkar, Michael Brown, and Park JY,* Effects of Flow-Mediated Shear Stress on Vascular Homeostasis: Implications on Mitochondrial Biogenesis and Microparticle Formation, *American College of Sports Medicine*, Indianapolis, IN, 2013

- 28. Boa Kim, Yisang Yoon, and Park JY,* NIH/NHLBI Mitochondrial Biology Symposium, Bethesda, MD 2013
- 29. Steven Forrester, Hojun Lee, Keisuke Kawata, and Park JY,* Expression of Connective Tissue Growth Factor in Differentiating L6 Myoblasts, *Temple University CHPSW Research Day*, Philadelphia, PA, 2013
- 30. Ji-Seok Kim, Hojun Lee, Michael Brown, and Park JY,* Effects of Flow-Mediated Shear Stress on Endothelial Microparticle Formation, *Temple University CHPSW Research Day*, Philadelphia, PA, 2013
- 31. Hojun Lee and Park JY,* Reciprocal expression of NCoR1 and PGC-1alpha during myogenic differentiation, *Temple University CHPSW Research Day*, Philadelphia, PA, 2013
- 32. Boa Kim, Hojun Lee, Keisuke Kawata, and Park JY,* Exercise-mediated high laminar shear stress causes mitochondrial biogenesis in vascular endothelium, *Temple University CHPSW Research Day*, Philadelphia, PA, 2013
- 33. Keisuke Kawata, Hojun Lee, Boa Kim and Park JY,* Endurance exercise training without cognitive intervention is not sufficient to induce mitochondrial biogenesis in the mouse brain, *Temple University CHPSW Research Day*, Philadelphia, PA, 2013
- 34. Junyoung Hong, Kijeong Kin, Aram Yoon, Park JY, and Sukho Lee, The effect of Herbal Diet on Skeletal Muscle Mass after Resistance Training in Rats, *American College of Sports Medicine*, Indianapolis, IN, 2013
- 35. Aram Yoon, Kijeong Kim, Junyoung Hong, Park JY, Sukho Lee, Effect of Acupuncture on Skeletal Muscle Mass after Resistance Training in Rats, *American College of Sports Medicine*, Indianapolis, IN, 2013
- 36. Sukho Lee, KiJeong Kim, Junyoung Hong, Aram Yoon, and Park JY, Acupuncture or Herb Medicine Augment Gaining Muscle Strength in Response to Resistance Training in Rats, *American College of Sports Medicine*, Indianapolis, IN, 2013
- 37. Ji-Seok Kim, Boa Kim, Park JY,* Combined effect of flow-mediated shear stress and resveratrol on Sirt1 / PGC-1α pathway in vascular endothelial cells, *Experimental Biology, San Diego*, CA 2012
- 38. Boa Kim, Peter Hart, Minsoo Kang, Stephen Roth, Michael Brown, James Hagberg, Park JY,* Functional study of tumor suppressor p53 gene variation: effect on cardiovascular adaptation to exercise training, *Experimental Biology, San Diego*, CA 2012
- 39. Jan Kretzschmar, Park JY, 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 Meeting*, *Orlando*, FL 2011
- 40. Ji-seok Kim, Boa Kim, Deborah L. Feairheller, Michael D. Brown, and Park JY,* eNOS Phosphorylation Under Flow-Mediated Shear Stress: Effects of Flow Pattern and Ambient Oxygen Concentration, 58th American College of Sports Medicine, Denver, CO, Medicine and Science in Sports and Exercise, 43 (5): 742-743, 2011

- 41. Boa Kim, Ji-Seok Kim, Deborah Feairheller, Katie Sturgeon, Michael Brown and Park JY,* Effects of Laminar Shear Stress on Mitochondrial Biogenesis in Human Umbilical Vein Endothelial Cells, 58th American College of Sports Medicine, Denver, CO, Medicine and Science in Sports and Exercise, 43(5): 464, 2011
- 42. Jan Kretzschmar, Deborah L. Feairheller, Park JY, 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, 58th American College of Sports Medicine, Denver, CO, 2011
- 43. Deborah L. Feairheller, Kathleen M. Sturgeon, Boa Kim, Keith M. Diaz, Sheara T. Williamson, Praveen Veerabhadrappa, Jan Kretzschmar, Park JY, and Michael D. Brown, Translational Approach to Understanding Endothelial Adaptations to Exercise, 58th American College of Sports Medicine, Denver, CO, Medicine and Science in Sports and Exercise, 43(5): 70-71, 2011
- 44. Kathleen Sturgeon, Deborah Feairheller, Boa Kim, Park JY, and Michael Brown, Endothelial Nitric Oxide Synthase Activation: Laminar Shear Stress vs. Low Oxidant Conditions, 58th American College of Sports Medicine, Denver, CO, Medicine and Science in Sports and Exercise, 43(5): 464-465, 2011
- 45. Deborah L Feairheller, Park JY, Kathleen M Sturgeon, Boa Kim, & Michael D Brown, Effects of Laminar Shear Stress on Race-dependent Oxidative Stress Responses in Human Umbilical Vein Endothelial Cells, *Experimental Biology*, Washington DC, 2011
- 46. Kathleen Sturgeon, Boa Kim, Park JY, Michael D. Brown, Laminar Shear Stress Pre-Conditioning Restores VEGFR2 Activation Following an Oxidant Challenge in Endothelial Cells, *Experimental Biology*, Washington DC, 2011
- 47. Deborah L Feairheller, Park JY, Michael D. Brown, Effects of TNF-α stimulation on NOS expression in racially-derived HUVECs, *Temple University Fellow Retreat*, Philadelphia, PA 2010
- 48. Deborah L Feairheller, Park JY, Praveen Veerabhadrappa, Michael D. Brown, Racial Differences in Tumor Necrosis Factor-alpha-Induced Endothelial Microparticle and Interleukin-6 Production, *American Heart Association-High Blood Pressure Research Conference*, DC, 2010
- 49. Boa Kim, Park JY,* Mitochondrial fission protein Drp1 plays a crucial role for myotube differentiation by regulating mitochondria-mediated apoptosis, *American Physiological Society-ACSM Integrated Physiology of Exercise*, Miami, FL, *Medicine and Science in Sports and Exercise*, 42 (10): 70-71, 2010
- 50. Park JY,* Boa Kim, Michael D. Brown, Ji-Seok Kim, Effects of Oxygen Tension in Shear Stress-Induced eNOS Activation in Human Endothelial Cells, *American Physiological Society-ACSM Integrated Physiology of Exercise*, Miami, FL, *Medicine and Science in Sports and Exercise*, 42(10): 42-43, 2010
- 51. Boa Kim, James M. Hagberg, Stephen M. Roth, Thomas O. Obisesan, Michael D. Brown, and Park JY,* Greater Cardiovascular Adaptation to Aerobic Exercise Training in Arginine-Allele Carriers of p53 codon 72 Arginine/Proline Polymorphism in Individuals having Pre-Hypertension, *Temple University CHPSW Research Festival*, Temple University, PA, 2010

- 52. Deborah L Feairheller, Park JY, Kathleen M Sturgeon, Boa Kim, Sheara T Williamson¹, Keith M. Diaz¹, Michael D Brown, Differentiating racial differences in oxidative stress levels: in vitro and in vivo, *Experimental Biology*, Anaheim, CA, 2010
- 53. Park JY, T Matsumoto, HJ Sung, W Ma, P Wang, JW Choi, SC Leary, SA Anderson, RS Balaban, JG Kang, PM Hwang, Tumor Suppressor p53 Determines Muscle Mitochondrial DNA Content and Aerobic Exercise Capacity, *Mitochondrial Biology in Cardiovascular Health & Diseases*, Bethesda, MD, 2008
- 54. HJ Sung, W Ma, Park JY, T Matsumoto, C Combs, JP McCoy Jr., P Wang, JG Kang, and PM Hwang, Mitochondrial respiration protects against DNA damage, *Mitochondrial Biology in Cardiovascular Health & Diseases*, Bethesda, MD, 2008
- 55. Park JY, J Choi, HJ Sung, Q Ali, PM Hwang, p53 regulates exercise capacity and skeletal muscle metabolism, *Keystone meeting (Metabolic Syndrome and Cardiovascular Risk*, Denver, CO, 2007
- 56. W. Ma, H. J. Sung, Park JY, T. Matsumoto, Q. Ali, S. Matoba, J. G. Kang and P. M. Hwang, Resistance to p53 dependent chemosensitivity in respiratory deficient cells, *NIH Research Festival*, Bethesda, MD, 2007
- 57. AS Zago, NM Fenty, JJ Park, Park JY, RE Ferrell, T Ellis, S Attipoe, A Zanesco, MD Brown, The influence of physical activity and the eNOS T-786C polymorphism on changes in nitric oxide concentration, blood flow and blood pressure, *Experimental Biology Meeting*, DC, 2007
- 58. T Ellis, NM. Fenty, Park JY, DA Phares, MD Brown, JM Hagberg, Changes in Reactive hyperemia and plasma Ox-LDL levels with aerobic exercise training are inversely related, 54rd American College of Sports Medicine Annual Meeting, 2007
- 59. Park JY, IK Farrance, HJ Jo, SR Brant, SM Roth, MD Brown, A Promoter Polymorphism regulates NFKB1 gene transactivity in Human Endothelial Cells under Laminar Shear Stress, 53rd American College of Sports Medicine Annual Meeting, Denver, CO, 2006
- 60. Park JY, NM Fenty, SM Roth, JM Hagberg, MD Brown, iNOS (CCTTT)n tandem repeat polymorphism is associated with Glomerular Filtration Rate (GFR) in individuals with high cardiovascular disease risks, 21th American Society of Hypertension 21st Annual Scientific Meeting and Exposition, 2006
- 61. MJ Kim, SH Yang, KS Lee, Park JY, SW Kwon, HS Chi, CJ Park, Long-term exercise training down-regulates caveolin-1 expression in mouse bone marrow and spleen cells during aging process, *The 7th ISEI (International Society of Exercise Immunology) Symposium*; Monaco, 2005
- 62. Park JY, JJ Park, RE Ferrell, DA Phares, JM. Hagberg, MD Brown, NADPH oxidase p22phox sequence variants and cardiovascular fitness level correspond to modulation of systemic oxidative stress by exercise training, 2004 APS intersociety Meeting: The integrative Biology of Exercise, Texas, Austin, 2004
- 63. Park JY, MH Roltsch, RE Ferrell, BD Hand, JJ Park, JM Jones, MD Brown, Interaction of the eNOS gene and physical activity level on flow-mediated vasodilation, *Medicine and Science in Sports and Exercise* 35(5 suppl.) S184, 2003

- 64. MJ Kim, Park JY, SH Yang, HS Ji, SU Kweon, CJ Park, Long-term moderate exercise could affect lymphoid progenitor pools during aging process, *The 6th ISEI (International Society of Exercise Immunology) Symposium*; Exercise, Muscle Metabolism and Immune Function, Copenhagen, Denmark, 2003
- 65. JA Mckenzie, EP Weiss, JJ Park, Park JY, O Kulaputana, MD Brown, Exercise Training and the response on nitric oxide to an oral glucose tolerance test (OGTT), *Medicine and Science in Sports and Exercise* 35(5 suppl.): S11, 2003
- 66. MJ Kim, Park JY, YS Jin, HB Moon, Age-related alterations of hematopoietic system and exercise therapy as a possible modality for aging of hematopoietic system, *The 29th World Congress of The International Society of Hematology (ISH)*, 2002
- 67. MJ Kim, WR Lee, HB Moon, Park JY, and YS Jin, Exercise-induced immunomodulation during aging process, *Medicine and Science in Sports and Exercise*, 2000.
- 68. Park JY, YS Jin, MJ Kim, ST Jung, TW Jun, The Effects Of Antioxidant Vitamins Supplementation On Exercise-Induced Acute Phase Response Of Cell Mediated Immunity, *Medicine and Science in Sports and Exercise* 31(5S): S171, 1999
- 69. YS Jin, Park JY, MH Kim, YK Kim, HS Rhyu, HJ Lee, The Effects Of Exercise Pattern On Acute Response Of T Lymphocyte And NK Cell: To Search A Immunological Threshold Around AT Level, *Medicine and Science in Sports and Exercise* 31(5S): S61, 1999
- 70. YS Jin, YK Kim, Park JY, JH Kim, The correlation between throwing speed and shoulder rotators & trunk flex/ext in the professional baseball pitchers, *Medicine and Science in Sports and Exercise*, 30(5S): 178, 1998

D. Invited Talks

- 1. <u>Mitochondria in Endothelial Cells</u>, NHLBI Working Group, "Unlocking the Secrets of Mitochondria in the Cardiovascular System: Path to a Cure in Heart Failure", Bethesda, MD. August 6-7, 2018
- Fluid Shear Stress-induced Mitochondrial Remodeling: Molecular Genetic Insights into Physical
 <u>Activity and Cardiovascular Health</u>, Cardiovascular Research Center, Lewis Katz School of
 Medicine, Temple University, November 16, 2017
- 3. <u>Tumor suppressor TP53 is a potential molecular transducer mediating shear stress-induced</u> <u>mitochondrial remodeling</u>, Center for Metabolic Disease Research Faculty Science Meeting, Lewis Katz School of Medicine, Temple University, January 27, 2017.
- 4. <u>Exercise-induced mitochondrial remodeling and translational approaches: Molecular genetics insights into the exercise intervention and vascular health</u>, 28th International Sport Science Congress, Ansan, Korea, August 25, 2016.
- 5. <u>The role of tumor suppressor p53 on shear stress-induced mitochondrial remodeling in vascular endothelium</u>, Sungkyunkwan University, Suwon, Korea, August 22, 2016

- 6. <u>Exercise-induced endothelial mitochondrial remodeling and vascular function and disease</u>, Seoul National University, December 15, 2015
- 7. <u>Endothelial mitochondria: Contribution to vascular function and disease</u>, University of Seoul, December 13, 2015
- 8. <u>Exercise-induced Mitochondrial Remodeling in Vascular Endothelium: Molecular Genetic Insights into the Exercise Intervention and Vascular Health</u>, University of Houston, TX, June 17th, 2015
- 9. <u>Exercise-Induced Endothelial Mitochondria Remodeling and Vascular Function and Diseases</u>, Seoul National University, Seoul, Korea, December 16th, 2015
- 10. <u>Endothelial Mitochondria: Contribution to Vascular Function and Disease</u>, University of Seoul, Korea, December 13th, 2015
- 11. <u>Endothelial Dysfunction and Shear Stress-Induced Mitochondrial Remodeling</u>, University of Illinois at Chicago, IL, April 18th, 2014
- 12. <u>Exercise-induced Mitochondrial Biogenesis: Insights into the function of p53</u>, Seoul National University, Seoul, Korea, May 14th, 2012
- 13. <u>Past, Present, and Future: Research in the exercise sciences</u>, Chungnam National University, Daejeon, Korea, May 23rd, 2012
- 14. The Biological Basis of Physical Activity, Asan Medical Center, Seoul, Korea, May 18th, 2012
- 15. <u>Effects of Shear Stress on Endothelial Cell Phenotype: Insight into the effects of exercise on vascular ROS detoxification</u>, Tutorial Lecture, 58th American College of Sports Medicine annual meeting, Denver, CO, June 3rd, 2011
- 16. <u>Flow-Induced Mitochondrial Biogenesis: Insight into The Effects of Exercise</u>, Cardiovascular Research Center Seminar/Department of Physiology, Temple University Medical School, Philadelphia, PA, February 9th, 2012
- 17. <u>Determination of mitochondrial Energy Metabolism by Tumor Suppressor p53</u>, 7th Korean United States Applied Physiology Society Meeting, Baltimore, MD, June 6th, 2010
- 18. <u>Exercise Physiology Research: Cellular Response to Physical Exercise</u>, Introduction to Kinesiology Class Guest Lecture Series, Temple University, PA, March 21st, 2014
- 19. <u>Cellular Adaptation to Physical Activity</u>, Introduction to Kinesiology Class Guest Lecture Series, Temple University, PA, March 20th, 2013
- 20. <u>Molecular Physiology of Exercise</u>, Introduction to Kinesiology Class Guest Lecture Series, Temple University, PA, October 18th, 2013
- 21. <u>Exercise Physiology Research</u>, Introduction to Kinesiology Class Guest Lecture Series, Temple University, PA, October 17th, 2012

E. Book Chapters and Translations

- 1. Effects of Exercise on Hypertension: From Cells to Physiological Systems, <u>'Chapter 7. Effects of in vitro laminar shear stress as an exercise mimetic on endothelial cell health'</u>, Editors: Linda Piscatello and Michael Brown, Springer, 2015
- 2. ACSM's Resources for Clinical Exercise Physiology Translation and adaptation of the first English language edition, 'Chapter 3. Multiple Sclerosis (p.36-p.45)', Yeong Mun Publishing, 2007
- 3. Korea Society of Sports Medicine, Sports Medicine, 'Chapter 54. Exercise and Immune System (p.841 p.849)' Joon-Young Park, co-authored with Young-Soo Jin, MD, PhD, EuiHak publishing, 2001
- 4. Young-Soo Jin, Joon-Young Park et al. Sports Medicine (1st ed.), '*Chapter 3. Exercise and immunoendocrinology* (p.56 p.68)', HongKyung publishing, 1998

IV. TEACHING AND CURRICULUM DEVELOPMENT

A. Years at Colleges/Universities

2009-Present Department of Kinesiology, College of Public Health, Temple University

B. Courses Taught at Temple University

<u>Undergraduate Courses</u>

KINS 4312/5312 - Exercise and Nutrient Metabolism

Graduate Courses

KINS 5311 – Exercise Physiology

KINS 9204 - Cellular Adaptation to Exercise

KINS 9203 – Applied Neuromuscular Physiology

KINS 9201 – Cardiovascular Exercise Physiology

KINS 9683 - Mentored Research I, Grant Writing Course

KNIS 9882 - Independent Research

KNIS 9783 - Mentored Research II

Laboratory Seminar – Animal Cell Culture Techniques

Laboratory Seminar – Basic Laboratory Methods in Genetics

C. Dissertations/Thesis Committees

(Dissertation Chair)

Boa Kim, PhD

Effects of laminar shear stress on mitochondrial DNA integrity in endothelial cells, May 2014

Dianne Babbitt, PhD

Aerobic exercise training effect on in vivo and in vitro vascular endothelial inflammatory indices in African Americans: Implications for hypertension and cardiovascular health, May 2014

Ji-Seok Kim, PhD

Shear stress-induced sirt1 activation: Effects on mitochondrial biogenesis and endothelial senescence, December 2015

Hojun Lee, PhD

Effects of exercise preconditioning on muscle hypertrophy and mitochondrial remodeling following the subsequent resistance training, April 2016

Brittany Wilson, PhD

Effects of voluntary exercise preconditioning on left ventricular systolic function and cardiac autophagy in angiotensin II-induced hypertensive mice, December 2016

Soon-Gook Hong

TBD (Dissertation Chair), 2016-present

(Committee member)

Deborah Feairheller, PhD

Race-dependent modulation of endothelial cell response to shear stress: Implications for vascular health in African Americans, January 2011

Kathleen Sturgeon, PhD

In vivo and in vitro interactions of oxidative stress and laminar shear stress on vascular endothelial growth factor-mediated endothelial nitric oxide synthase activity, January 2011

Kathryn Mitchell, MS

The effect of hypothalamic suppression and caloric restriction on bone strength and geometry during puberty, May 2012

Sheara Williamson, PhD

The influence of aerobic exercise training on biomarkers of endothelial activation in sedentary Americans, January 2013

Tiffany Butler, PhD

The effects of post pubertal food restriction on bone architecture, strength, and medullary adipose composition, January 2014

Michelle Dianne Heayn, MD, PhD

The role of caveolae in PECAM-1 Mechanotransduction, May 2014

D. Preliminary Exam committee

2012	Tiffany Butler
2013	Jacqueline Philips
2013	Dianne Babbitt

2015 Hojun Lee

2015 **Brittany Wilson**

E. Other Students Supervised

Undergraduate Trainees

2010-2011	Harold Lee, Currently Research Assistant at UCONN
2011-2013	Lily Koh, Pre-Pharm, College of Science and Technology
2010-2012	Daniel Han, Pre-Pharm, College of Science and Technology
2012-2013	Andrea Catrambone, Pre-Health, Department of Kinesiology
2012- 2013	Phillip Kyle, Pre-PT, Department of Kinesiology
2012-2013	Bouvier C. Servilas, Pre-Health Professions, Department of Kinesiology
2016-2017	Jacqueline Sayoc, Neuroscience Program, College of Science and Technology
2016	Isabel Noboa, Pre-Med, College of Science and Technology, (STEPUP summer internship program)
2017	Jarel Elder, Cellular and Molecular Biology, West Chester University (STEPUP summer internship program)
2017-Present	Malik Sylla, Department of Biology, College of Science and Technology (MARC)

Graduate Trainees

Doctoral Students (Research Mentor)

2009-2011	Deborah Feairheller, Ph.D., (Degree earned, 2011) (Michael D. Brown, Advisor)
	Project : Racial difference in endothelial cell response to shear stress

Progress/Accomplishment: Trained for aseptic technique for cell culture, basic and advanced molecular biology techniques, and data interpretation skills; Post-doctoral

fellow at UCLA, Assistant Professor at Ursinus College.

2009-2011 Kathleen Sturgeon, Ph.D., (Degree earned, 2011) (Michael D. Brown, Advisor)

Project: Oxidative stress and laminar shear stress on VEGF signaling

Progress/Accomplishment: Trained for aseptic technique for cell culture, basic and advanced molecular biology techniques, and data interpretation skills; Post-doc at Abramson Cancer Center at UPENN, Assistant Professor at Penn State College of

Medicine

2009-2012 Keith Diaz, Ph.D., (Degree earned, 2011) (Michael D. Brown, Advisor)

Project: AT1R gene variants and vascular circadian clock gene study

Progress/Accomplishment: NIH F31 (Michael D. Brown, Sponsor; I served as a cosponsor), Trained for aseptic technique for cell culture, basic molecular biology techniques, and data interpretation skills, Currently Research Associate at Columbia Univ.

Master's Students

2010-2012	Alex Skacel, M.S., (Degree earned, 2012) Project : Muscle fiber type determination and histochemical assays for mitochondrial respiratory enzymes
2011-2013	Keisuke Kawata, (Degree earned, 2013) Project : Mitochondrial Calcium Handling in Traumatic Brain Injury
2012-2013	Steven Forrester, (Degree earned, 2013) Project : Bioinformatic Identification of Connective Tissue Growth Factor as an Osteogenic Protein within Skeletal Muscle.
2014-2016	Amanda Folk, (Degree earned, 2016)
2014-2016	Rebecca Schwartz, (Degree earned, 2016) Project : p53 polymorphism and metabolism
2014-2017	Sarah Ostraski, (Degree earned, 2017) Project : Establishing canine exercise training protocol
2015-2017	Eric Munoz, (Degree earned, 2017) Project : Folistatin Like-Protein 1 and systemic metabolism
2016-Present	Jamie Seonyeong Seo (Degree earned, 2018) Project : Vascular reactivity