# **Arturo Figueroa**

## **CRRICULUM VITAE**

Professor of Exercise Physiology

## **GENERAL INFORMATION**

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## **EDUCATION**

- Ph.D. Physiological Sciences (Applied Physiology), The University of Arizona
- M.S. Sports Medicine, Universidad Autónoma de Guadalajara
- M.D. Medicine, Universidad Autónoma de Guadalajara

# ACADEMIC POSITIONS

2017-Present	Professor of Exercise Physiology, Department of Kinesiology and Sport
	Management, Texas Tech University, Lubbock, TX.
2011-2017	Associate Professor of Exercise Science/Physiology, Department of Nutrition,
	Food and Exercise Sciences, Florida State University, Tallahassee, FL.
2015-2016	Visiting Associate Professor (sabbatical), Cardiovascular Institute,
	Cardiovascular Division of Medicine, Perelman School of Medicine, University
	of Pennsylvania, Philadelphia, PA.
2011-2013	Undergraduate Program Coordinator, Department of Nutrition, Food and
	Exercise Sciences, The Florida State University, Tallahassee, FL.
2004-2011	Assistant Professor of Exercise Science/Physiology, Department of Nutrition,
	Food and Exercise Sciences, Florida State University, Tallahassee, FL.
2000-2004	Visiting Assistant Professor of Exercise Science, Department of Exercise
	Science, Syracuse University, Syracuse, NY.

## HONORS AND AWARDS

- 2015- Researcher level 3, National System of Investigators of Mexico (National Research and Technology Council of Mexico, CONACYT) in the area of Medicine and Health Sciences.
- 2011- Fellow, American College of Sports Medicine

# PEER-REVIEWED PUBLICATIONS

Citations in Google Scholar: <u>https://scholar.google.com/citations?user=1LQgqh0AAAJ&hl=en</u>

- Dillon KN, Kang Y, Maharaj A, Martinez MA, Fischer SM Figueroa A. L-Citrulline Supplementation Attenuates Aortic Pressure and Pressure Waves During Metaboreflex Activation in Postmenopausal Women. *Br J Nutri* 2023 Sept 4:1-21. doi: 10.1017/S000711452300199X.
- 2. Dellinger JR, **Figueroa A**, Gonzales JU. Reactive hyperemia half-time response is associated with skeletal muscle oxygen saturation changes during cycling exercise. Microvascular Res 2023 Sept; 149:104569.

- 3. **Figueroa A**, Maharaj A, Kang Y, Dillon KN, Martinez MA, Morita M, Nogimura D, Fischer SM. Combined Citrulline and Glutathione Supplementation Improves Endothelial Function and Blood Pressure Reactivity in Postmenopausal Women. *Nutrients* 2023, 15(7), 1557.
- 4. **Figueroa A**, Wong A. Editorial for the Special Issue "Benefits of Supplementation with Larginine, Citrulline and Watermelon on Vascular and Metabolic Health". *Nutrients* 2023, 15 (6):1491.
- 5. Kang Y, Dillon KN, Martinez MA, Maharaj A, Fischer SM, **Figueroa A**. Combined L-Citrulline supplementation and slow velocity low-intensity resistance training improves leg endothelial function, lean mass, and strength in hypertensive postmenopausal women. *Nutrients* 2022; 15(1):74.
- 6. Maharaj A, Fischer SM, Dillon KN, Kang Y, Martinez MA, **Figueroa** A. Effects of L-citrulline supplementation on endothelial function and blood pressure in hypertensive postmenopausal women. *Nutrients* 2022; 14(20):4396.
- 7. Kang Y, Maharaj A, Dillon KN, Fischer SM, **Figueroa A**. Menopause influences aortic pulse pressure and pressure wave responses to metaboreflex activation in women. *Menopause* 29(12): 1423-1429, 2022.
- 8. Barzanjeh SP, Pescatello LS, **Figueroa A**, Ahmadizad S. The effects of alpha-Glycerylphosphorylcholine on heart rate variability and hemodynamic variables following sprint interval exercise in overweight and obese women. *Nutrients* 2022; 14(19):3970.
- Volino-Souza M, de Oliveira GV, Conte-Junior CA, Figueroa A, Alvares TS. Current Evidence of Watermelon (*Citrullus lanatus*) Ingestion on Vascular Health: A Food Science and Technology Perspective. *Nutrients*. 2022; 14(14):2913. https://doi.org/10.3390/nu14142913.
- 10. Maharaj A, Fischer SM, Dillon KN, Kang Y, Martinez MA, **Figueroa A.** Acute citrulline bunts aortic systolic pressure during exercise and sympathoactivation in hypertensive postmenopausal women. *Med Sci Sports Exerc*. 54(5):761-768, 2022.
- Jaime SJ, Nagel J, Maharaj A, Fischer SM, Schwab E, Martinson C, Radtke K, Mikat RP, Figueroa A. L-Citrulline supplementation attenuates aortic pulse pressure and wave reflection responses to cold stress in older adults. *Exp Gerontol* 2022; 159:111685.
- 12. Mason J, Tenenbaum GT, Jaime SJ, Roque N, Maharaj A, **Figueroa A**. Arterial Stiffness and Cardiorespiratory Fitness are Associated with Cognitive Function in Older Adults. *Behavioral Medicine*. 48(1):54-65, 2022.
- 13. Shiraseb F, Asbaghi O, Bagheri R, Wong A, **Figueroa A**, Mirzaei K. The effect of L-arginine supplementation on blood pressure in adults: A systematic review and dose-response meta-analysis of randomized clinical trials. *Adv Nutr* 13 (4): 1226-1242, 2022.
- Feresin R, Johnson S, Elam M, Pourafshar S, Navaei N, Akhavan N, Tenenbaum G, Figueroa A, Arjmandi BH. Effects of Strawberries on Bone Biomarkers in Pre- and Stage 1-hypertensive Postmenopausal Women: A Secondary Analysis. *Food Funct* 12(24):12526-12534, 2021.
- 15. Font-Farré M, Farche ACS, de Madeiros Takahashi AC, Guerra-Balic M, **Figueroa A**, Oviedo GR. Cardiac autonomic modulation response before, during and after submaximal exercise in older adults with intellectual disability. *Frontiers in Physiology* 12:702418, 2021.
- 16. Flores-Ramírez AG, Tovar-Villegas VI, Maharaj A, Garay-Sevilla ME, Figueroa A. Effects of L-Citrulline Supplementation and Aerobic Training on Vascular Function in Individuals with Obesity across the Lifespan. *Nutrients*. 2021; 13(9):2991.
- 17. Wong A, **Figueroa A**. Effects of acute stretching exercise and training on heart rate variability: A review. *J Strength Cond Res.* 35(5):1459-1466, 2021.

- Fischer SM, Wong A, Maharaj A, Jaime SJ, Figueroa A. Impaired pulse pressure amplification, augmentation index, and arterial stiffness are associated with reduced limb lean mass in overweight and obese postmenopausal women. *Exp Gerontol* 145:111194, 2021; doi: 10.1016/j.exger.2020.111194.
- 19. Oviedo GR, Javierre C, Font-Farré M, Tamulevicius N, Carbó-Carreté M, **Figueroa A**, Pérez-Testor S, Cabedo-Sanromá J, Moss SJ, Massó-Ortigosa N, Guerra-Balic M. Intellectual disability, exercise and aging: the IDEA Study: study protocol for a randomized controlled trial. *BMC Public Health* 20(1):1266, 2020.
- Gonzales JU, Fischer S, Maharaj A, Vellers H, Anderson T, Karnjanapiboonwong A, Subbiah S, Kellawan JM, Figueroa A. Response of exercise-onset vasodilator kinetics to L-citrulline supplementation during different phases of the menstrual cycle. *Physiol Rep*, 8(15):e14536, 2020.
- 21. Wong A, Jaime SJ, Grubbs B, Panton B, Fischer S, **Figueroa** A. Attenuated aortic blood pressure responses to metaboreflex activation in older adults with dynapenia. *Exp Gerontol*. Sep, 2020;138:110984. doi: 10.1016/j.exger.2020.110984.
- 22. Figueroa A, Jaime SJ, Morita M, Gonzales JU, Moinard C. L-citrulline supports vascular and muscular benefits of exercise training in older adults. *Exerc Sport Sci Rev* 48(3):133-139, 2020.
- Johnson SA, Navaei N, Pourafshar S, Jaime SJ, Akhavan NS, Alvarez-Alvarado S, Proaño GV, Litwin NS, Clark EA, Foley EM, George KS, Elam ML, Payton ME, Arjmandi BH, Figueroa A. Effects of Montmorency tart cherry juice consumption on cardiometabolic biomarkers in adults with metabolic syndrome: a randomized controlled pilot trial. *J Med Food* 23(12):1238-1247, 2020.
- 24. Sañudo B, Bartolomé D, Tejero S, Ponce-González JG, Loza JP, **Figueroa A**. Impact of active recovery and whole-body electromyostimulation on blood-flow and blood lactate removal in healthy people. *Front Physiol* 11:310, 2020.
- 25. Wong A, **Figueroa A**, Fischer SM, Bagheri R, Park SY. The effects of mat Pilates training on vascular function and body fatness in obese young women with elevated blood pressure. *Am J Hypertens* 33(6):563-569, 2020.
- 26. Grubbs BF, **Figueroa A**, Kim JS, Contreras RJ, Schmitt K, Panton LB. Whole-body Vibration Training in Frail, Skilled Nursing Home Residents. *Int J Exerc Sci* 13(3):140-156, 2020.
- 27. **Figueroa A**, Maharaj A, Johnson SA, Fischer SM, Arjmandi BH, Jaime SJ. Exaggerated aortic pulse pressure and wave amplitude during muscle metaboreflex activation in type 2 diabetes patients. *Am J Hypertens* 33(1):70-76, 2020.
- 28. Yang HH, Li XL, Zhang WG, **Figueroa A**, Chen LH, Qin LQ. Effect of oral L-citrulline on brachial and aortic blood pressure defined by resting status: evidence from randomized controlled trials. Nutrition & Metabolism 18:89, 2019.
- 29. Jaime SJ, Maharaj A, Alvarez-Alvarado S, **Figueroa A**. Impact of low-intensity resistance and whole-body vibration training on aortic hemodynamics and vascular function in postmenopausal women. *Hypertens Res* 42(12):1979-1988, 2019.
- 30. Wong A, Viola D, Bergen D, Caulfield E, Mehrabani J, **Figueroa** A. The effects of pumpkin seed oil supplementation on arterial hemodynamics, stiffness and cardiac autonomic function in postmenopausal women. *Comp Ther Clin Pract* 37:23-26, 2019.
- Wong A, Figueroa A. The effects of low intensity resistance exercise on cardiac autonomic function and muscle strength in obese postmenopausal women. J Aging Phys Act 27(6):855-860, 2019.

- 32. Compton RO, **Figueroa A**, Gonzales JU. Post-exercise hypotension in central aortic pressures following slow and fast walking and its relation to cardiorespiratory fitness. *J Sports Med Physical Fitness* 59(4):717-722, 2019.
- 33. **Figueroa A**, Okamoto T, Jaime SJ, Fahs CA. Impact of high- and low-intensity resistance training on arterial stiffness and blood pressure in adults across the lifespan: a review. *Pflügers Archiv Eur J Physiol* 471(3):467-478, 2019.
- 34. Wong A, **Figueroa A**. Effects of whole body vibration on heart rate variability: Acute responses and training adaptations. *Clin Physiol Funct* 39(2):115-121, 2019.
- 35. Hong MY, Beidler J, Hooshmand S, **Figueroa A**, Kern M. Watermelon and L-Arginine consumption improve serum lipid profile and reduce inflammation and oxidative stress by altering gene expression in rats fed an atherogenic diet. *Nutrition Res* 58:46-54, 2018.
- 36. Glenn K, Klarich DS, Kalaba M, **Figueroa A**, Hooshmand S, Kern M, Hong MY. Effects of watermelon powder and L-arginine supplementation on azoxymethane-induced colon carcinogenesis in rats. *Nutr Cancer* 70(6):938-945, 2018.
- 37. Wong A, **Figueroa A**, Son WM, Chernykh O, Park SY. The effects of stair climbing on arterial stiffness, blood pressure, and leg strength in postmenopausal women with stage 2 hypertension. *Menopause* 25(7):731-737, 2018.
- Vargas-Ortiz K, Perez-Vazquez V, Figueroa A, Macias-Cervantes MH. Aerobic training but not resistance training increases SIRT3 in skeletal muscle of sedentary obese male adolescents. *Eur J Sport Sci*\_18(2):226-234, 2018.
- 39. Wong A, **Figueroa A**, Sanchez-Gonzalez MA, Son WM, Chernykh O, Park SY. Effectiveness of a Tai Chi intervention on cardiac autonomic function and symptomatology in women with Fibromyalgia. *J Aging Phys Act* 26(2):214-221, 2018.
- 40. Feresin RG, Johnson SA, Pourafshar S, Campbell JC, Jaime SJ, Navaei N, Elam ML, Akhavan NS, Alvarez-Alvarado S, Tenenbaum G, Brummel-Smith K, Salazar G, Figueroa A, Arjmandi BH. Effects of daily consumption of freeze-dried strawberries for eight weeks on blood pressure and arterial stiffness in pre- and stage 1-hypertensive postmenopausal women: a randomized, double-blind, placebo-controlled trial. *Food & Function* 8(11):4139-4149, 2017.
- 41. Lefferts W, Sperry SD, Jorgensen RS, Kasprowicz AG, Skilton MR, **Figueroa A**, Heffernan KS. Carotid stiffness, extra-media thickness and visceral adiposity in young adults. *Atherosclerosis* 265:140-146, 2017.
- 42. Alvarez-Alvarado S, Jaime SJ, Ormsbee MJ, Campbell JC, Post J, Pacilio J, **Figueroa A**. Benefits of whole-body vibration on arterial function and muscle strength in young overweight/obese women. *Hypertension Res* 40(5):487-492, 2017.
- 43. Wong A, Sanchez-Gonzalez M, Kalfon R, Alvarez-Alvarado S, **Figueroa A**. The effects of stretching training on cardiac autonomic function in obese postmenopausal women. *Altern Ther Health Med* 23(2):20-26, 2017.
- 44. Johnson SA, Feresin RG, Navaei N, **Figueroa A**, Elam ML, Akhavan NS, Payton ME, Arjmandi BH. Effects of daily blueberry consumption on circulating biomarkers of oxidative stress, inflammation, and antioxidant defense in postmenopausal women with pre- and stage 1-hypertension: a randomized controlled trial. *Food & Function* 8(1):372-389, 2017.
- 45. **Figueroa A**, Wong A, Jaime SJ, Gonzales JU. Influence of L-citrulline and watermelon supplementation on vascular function and exercise performance. *Curr Opin Clin Nutr Metab Care* 20(1):92-98, 2017.
- 46. **Figueroa A**, Alvarez-Alvarado S, Jaime SJ, Johnson SA, Campbell JC, Feresin RG, Elam ML, Navaei N, Pourafshar S, Arjmandi BH. Influence of low and normal appendicular lean mass on

central blood pressure and wave reflection responses to muscle metaboreflex activation in postmenopausal women. *Clin Exp Pharmacol Physiol* 43(12):1243-1246, 2016.

- 47. Wong A, Alvarez-Alvarado S, Kinsey AW, **Figueroa** A. Whole-body vibration exercise therapy improves cardiac autonomic function and blood pressure in obese pre- and stage-1 hypertensive postmenopausal women. *J Alt Complement Med* 22(12):970-976, 2016.
- 48. Menendez H, Ferrero C, Martin-Hernandez J, **Figueroa A**, Marin PJ, Herrero AJ. Chronic effects of simultaneous electromyostimulation and vibration on leg blood flow in spinal cord injury. *Spinal Cord* 54(12):1169-1175, 2016.
- 49. **Figueroa A**, Jaime SJ, Alvarez-Alvarado S. Whole-body vibration as a potential countermeasure for dynapenia and arterial stiffness. *Integr Med Res* 5(3):204-211, 2016.
- 50. Wong A, Chernykh O, **Figueroa A**. Chronic L-citrulline supplementation improves cardiac sympathovagal balance in obese postmenopausal women: A preliminary report. *Auton Neurosci* 198:50-53, 2016.
- 51. **Figueroa A**, Alvarez-Alvarado S, Jaime S, Kalfon R. L-citrulline supplementation attenuates hemodynamic and arterial stiffness responses to metaboreflex and cold stress in overweight men. *Br J Nutr* 116(2):279-285, 2016.
- 52. Kingsley JD and **Figueroa A**. Acute and training effects of resistance exercise on heart rate variability. *Clin Physiol Funct Imaging* 36(3):179-187, 2016.
- 53. Menendez H, Ferrero C, Martin-Hernandez J, **Figueroa A**, Marin PJ, Herrero AJ. Acute effects of simultaneous electromyostimulation and vibration on leg blood flow in spinal cord injury. *Spinal cord* 54(5):383-389, 2016.
- 54. Sañudo B, Cesar-Castillo M, Tejero S, Nunes N, de Hoyo M, **Figueroa A**. Effects of vibration on leg blood flow after intense exercise and its influence on subsequent exercise performance. *J Strength Cond Res* 30(4):1111-1117, 2016.
- 55. Wong A, Alvarez-Alvarado S, Jaime SJ, Kinsey AW, Spicer MT, Madzima TA, **Figueroa A**. Combined whole body vibration training and L-citrulline supplementation improves pressure wave reflection in obese postmenopausal women. *Appl Physiol Nutr Metab* 41(3):292-297, 2016.
- 56. **Figueroa A**, Jaime SJ, Johnson SA, Alvarez-Alvarado S, Campbell JC, Feresin RG, Elam ML, Arjmandi BH. Impact of age on aortic blood pressure and wave reflection responses to metaboreflex activation in postmenopausal women. *Exp Gerontol* 70:119-124, 2015.
- 57. Kalfon R, Campbell J, Alvarez-Alvarado S, **Figueroa A**. Aortic hemodynamics and arterial stiffness responses to muscle metaboreflex activation with concurrent cold pressor test. *Am J Hypertension* 28(11):1332-1338, 2015.
- 58. **Figueroa A**, Kalfon, R Wong A. Whole-body vibration training decreases ankle systolic blood pressure and leg arterial stiffness in obese postmenopausal women with high blood pressure. *Menopause*. 22(4):423-427, 2015.
- 59. Menendez H, Martin-Hernandez J, Ferrero C, **Figueroa A**, Herrero AJ, Marin PJ. Influence of isolated or simultaneously applied electromyostimulation and vibration on leg blood flow. *Eur J Appl Physiol*. 115(8):1747-1755, 2015.
- 60. Sanudo B, Carrasco L, de Hoyo M, **Figueroa** A, Saxton JM. Vagal modulation and symtomatology following a 6-month aerobic exercise program in women with fibromyalgia. *Clin Exp Rheumatol.* 88 (1):41-45, 2015.
- 61. Vargas-Ortiz K, Perez-Vazquez V, Diaz-Cisneros FJ, **Figueroa A**, Jiménez-Flores L, Rodriguez-DelaRosa G, Macias-Cervantes MH. Aerobic training increases expression levels of

SIRT3 and PGC-1a in skeletal muscle of overweight adolescents improve without change in caloric intake. *Pediatr Exerc Sci* 27(2):177-184, 2015.

- 62. **Figueroa A**, Alvarez-Alvarado S, Ormsbee MJ, Madzima TA, Campbell JC, Wong A. Impact of L-citrulline supplementation and whole-body vibration training on arterial stiffness and leg muscle function in obese postmenopausal women with high blood pressure. *Exp Gerontol*. 63:35-40, 2015.
- 63. Hong MY, Harting N, Kaufman K, Hooshmand, **Figueroa A**, Kern M. Watermelon consumption improves inflammation and antioxidant capacity in rats fed an atherogenic diet. *Nutr Res.* 35(3):251-258, 2015.
- 64. Johnson SA, **Figueroa** A, Navaei N, Wong A, Kalfon R, Ormsbee LT, Feresin RG, Elam ML, Hooshmand S, Payton ME, Arjmandi BH. Daily blueberry consumption improves blood pressure and arterial stiffness in postmenopausal women with pre- and stage1-hypertension. *J Acad Nutr Diet*. 115(3):369-377, 2015.
- 65. Ormsbee MJ, Kinsey AW, Eddy WR, Madzima TA, Arciero PJ, **Figueroa** A, Panton LB. The influence of nighttime feeding of carbohydrate or protein with exercise training on appetite and cardiometabolic risk in young obese women. *Appl Physiol Nutr Metab* 40(1):37-45, 2015.
- 66. Bunsawat K, Goulopoulou S, Collier SR, **Figueroa A**, Pitetti K, and Baynard T. Normal heart rate with tilt, yet autonomic dysfunction in persons with Down syndrome. *Med Sci Sports Exer*. 47(2):250-256, 2015.
- 67. Bang HS, Seo DY, Chung YM, Oh KM, Park JJ, **Arturo F**, Jeong SH, Kim N, Han J. Ursolic acid-induced elevation of serum irisin augments muscle strength during resistance training in men. *Korean J Physiol Pharmacol* 18(5):441-446, 2014.
- 68. Koutnik AP, **Figueroa A**, Wong A, Ramirez KJ, Ormsbee M, Sanchez-Gonzalez MA. Impact of acute whole-body cold exposure with concurrent isometric handgrip exercise on aortic pressure waveform characteristics. *Eur J Appl Physiol* 114(9):1779-1787, 2014.
- 69. **Figueroa A**, Wong A, Kalfon R. Effects of watermelon supplementation on aortic hemodynamics responses to the cold pressor test in obese hypertensive adults. *Am J Hypertension* 27(7):899-906, 2014.
- 70. **Figueroa A**, Wong A, Kinsey A, Kalfon R, Eddy W, Ormsbee MJ. Effects of milk proteins and combined exercise training on aortic hemodynamics and arterial stiffness in young obese women with high blood pressure. *Am J Hypertension* 27(3):338-344, 2014.
- 71. Koutnik AP, Wong A, Kalfon R, Madzima TA, **Figueroa A**. Acute passive vibration reduces arterial stiffness and aortic wave reflection in stroke survivors. *Eur J Appl Physiol* 114(1):105-111, 2014.
- 72. Wong A and **Figueroa A**. Eight weeks of stretching training reduces wave reflection and aortic blood pressure in obese postmenopausal women. *J Human Hypertension* 28(4):246-250, 2014.
- 73. **Figueroa A**. Effects of resistance training on central blood pressure and wave reflection in obese adults with prehypertension. *J Human Hypertension* 28(3):143-144, 2014.
- 74. **Figueroa A**, Kalfon R, Madzima TA, Wong A. Effects of whole-body vibration exercise training on aortic wave reflection and muscle strength in postmenopausal women with prehypertension and hypertension. *J Human Hypertension* 28(2):118-122, 2014.
- 75. **Figueroa A**, Kalfon R, Madzima TA, Wong A. Whole-body vibration exercise training reduces arterial stiffness in postmenopausal women with prehypertension and hypertension. *Menopause* 2(12):131-136, 2014.
- 76. Kim CW, **Figueroa A**, Park CH, Kim KB, Seo DY, Lee HR, Kwak YS. Combined effects of food and exercise on anaphylaxis. *Nutr Res Pract* 7:347-351, 2013.

- 77. **Figueroa A**, Arjmandi BH, Wong A, Sanchez-Gonzalez MA, Simonavice E, Daggy B. Effects of hypocaloric diet, low-intensity resistance exercise with slow movement, or both on aortic hemodynamics and muscle mass in obese postmenopausal women. *Menopause* 20(9):967-972, 2013.
- 78. Sañudo B, Cesar-Castillo M, Tejero S, Nunes N, de Hoyo M, **Figueroa A**. Cardiac autonomic response during recovery from a maximal exercise using whole body vibration. *Complementary Therapies in Medicine* 21:294-299, 2013.
- 79. Sañudo B, Alfonso-Rosa R, del Pozo-Cruz B, del Pozo-Cruz J, Galiano D, **Figueroa A**. Whole body vibration training improves leg blood flow and adiposity in patients with type 2 diabetes mellitus. *Eur J Appl Physiol* 113(9):2245-2252, 2013.
- 80. Sanchez-Gonzalez MA, **Figueroa A**. Cold exposure attenuates post exercise cardiac vagal reactivation and sympathetic withdrawal. *Auton Neurosci* 176:95-97, 2013.
- 81. **Figueroa A**, Wong A, Hooshmand S, Sanchez-Gonzalez MA. Effects of watermelon supplement on arterial stiffness and wave reflection amplitude in postmenopausal women. *Menopause* 20:573-577, 2013.
- 82. Sanchez-Gonzalez MA, Koutnik A, Ramirez K, Wong A, **Figueroa A**. The effects of short term L-citrulline supplementation on wave reflection responses to cold exposure with concurrent isometric exercise. *Am J Hypertension* 26:518-526, 2013.
- 83. **Figueroa A**, Vicil F, Sanchez-Gonzalez MA, Wong A, Ormsbee MJ, Hooshmand S and Daggy B. Effects of diet and/or low-intensity resistance exercise training on arterial stiffness and body lean mass in obese postmenopausal women. *Am J Hypertension* 26:416-423, 2013.
- 84. Seo DY, Lee SR, Figueroa A, Kwak YS, Kim N, Rhee BD, Ko KS, Bang HS, Baek YH, Han J. Aged garlic extract enhances exercise-mediated improvement of metabolic parameters. *Nutr Res Pract* 6:513-519, 2012.
- 85. Kingsley JD, **Figueroa A**. Effects of resistance exercise training on resting and post-exercise forearm blood flow and wave reflection in overweight and obese women. *J Human Hypertension* 26: 684-690, 2012.
- 86. Sanchez-Gonzalez MA, Wong AM, Vicil F, Gil R, Park SY, **Figueroa A**. Impact of passive vibration on pressure wave characteristics. *J Human Hypertension* 26:610-615, 2012.
- 87. Seo DY, Lee SR, **Figueroa A**, Kim HK, Baek YH, Kwak YS, Kim N, Choi TH, Rhee BD, Ko KS, Park BJ, Park SY, Han J. Yoga training improves metabolic parameters in obese boys. *Korean J Physiol Pharmacol* 16:175-180, 2012.
- 88. **Figueroa A**, Sanchez-Gonzalez MA, Wong A, Arjmandi BH. Watermelon extract supplementation reduces ankle blood pressure and carotid augmentation index in obese adults with prehypertension or hypertension. *Am J Hypertension* 25:640-643, 2012.
- 89. **Figueroa A**, Gil R, Wong A, Hooshmand S, Park SY, Vicil F, Sanchez-Gonzalez MA. Wholebody vibration training reduces arterial stiffness, blood pressure, and sympathovagal balance in young overweight/obese women. *Hypertension Res* 35:667-672, 2012.
- 90. Wong A, Sanchez-Gonzalez MA, Gil R, Vicil F, Park SY, **Figueroa** A. Passive vibration on the legs reduces peripheral and systemic arterial stiffness. *Hypertension Res* 35:126-127, 2012.
- 91. **Figueroa A**, Gil R, Sanchez-Gonzalez MA. Whole-body vibration attenuates the increase in leg arterial stiffness and aortic systolic blood pressure during post-exercise muscle ischemia. *Eur J Appl Physiol* 111:1261-1268, 2011.
- 92. Figueroa A, Vicil F, Sanchez-Gonzalez MA. Acute exercise with whole-body vibration decreases wave reflection and leg arterial stiffness. *Am J Cardiovasc Dis* 1:60-67, 2011.

- 93. **Figueroa A,** Park SJ, Seo DY, Sanchez-Gonzalez MA, Baek YH. Combined resistance and endurance exercise training improves arterial stiffness, blood pressure, and muscle strength in postmenopausal women. *Menopause* 18:980-984, 2011.
- 94. Kingsley JD, McMillan V, Figueroa A. Resistance exercise training does not affect postexercise hypotension and wave reflection in women with fibromyalgia. *Appl Physiol Nutr Metabol* 36:254-263, 2011.
- 95. **Figueroa A**, Vicil F. Post-exercise aortic hemodynamics responses to low intensity resistance exercise with and without vascular occlusion. *Scand J Med Sci Sports* 21(3):431-436, 2011.
- 96. Sanchez-Gonzalez MA, Weider R, Kim JS, Vicil F, **Figueroa A**. Creatine supplementation attenuates hemodynamic and arterial stiffness responses following an acute bout of isokinetic exercise. *Eur J Appl Physiol* 111:1965-1971, 2011.
- 97. **Figueroa A**, Sanchez-Gonzalez MA, Perkins-Veazie P, Arjmandi BH. Effects of watermelon supplementation on aortic blood pressure and wave reflection in individuals with prehypertension: a pilot study. *Am J Hypertension* 24:40-44, 2011.
- 98. Kingsley JD, McMillan V, Figueroa A. The effects of 12 weeks of resistance exercise training on disease severity and autonomic modulation at rest and after acute leg resistance exercise in women with fibromyalgia. Arch Phy Med Rehabil 9(10):1551-1557, 2010.
- 99. Agiovlasitis S, Collier SR, Baynard T, Echols GH, Goulopoulou S, **Figueroa A**, Beets MW, Pitetti KH, Fernhall B. Autonomic response to upright tilt in people with and without Down syndrome. *Res Dev Disabil* 31:857-863, 2010.
- 100. **Figueroa A**, Trivino J, Sanchez-Gonzalez MA, Vicil F. Oral L-citrulline supplementation attenuates blood pressure response to cold pressor test in young men. *Am J Hypertension* 23:12-16, 2010.
- 101. **Figueroa A**, Hooshmand S, Figueroa M, Bada AM. Cardiovagal baroreflex and aortic hemodynamic responses to isometric exercise and post-exercise muscle ischemia in resistance-trained men. *Scand J Med Sci Sports* 20:305-309, 2010.
- 102. Kingsley JD, Panton LB, McMillan V, **Figueroa A**. Cardiovascular autonomic modulation after acute resistance exercise in women with fibromyalgia. *Arch Phy Med Rehabil* 90:1628-1634, 2009.
- 103. Panton LB, **Figueroa A**, Kingsley JD, Hornbuckle L, Wilson J, St. John N, Abood D, Mathis R, VanTassel J, McMillan V. The Effects of Resistance Training and Chiropractic Care in Women with Fibromyalgia *J Altern Complement Med* 15:321-8, 2009.
- 104. Heffernan KS, Sosnoff JJ, Ofori E, Jae SY, Baynard T, Collier SR, Goulopoulou S, Figueroa A, Woods JA, Pitetti KH, Fernhall B. Complexity of force output during static exercise in individuals with Down Syndrome. *J Appl Physiol* 106:1227-33, 2009.
- 105. Fernhall B, Baynard T, Collier SR, **Figueroa A**, Gouloupolou S, Kamimori GH, Pitetti KH. Catecholamine response to maximal exercise in persons with Down syndrome. *Am J Cardiol* 103:724-726, 2009.
- 106. Franklin RM, Baynard T, Weinstock RS, Goulopoulou S, Carhart R, Ploutz-Snyder R, Figueroa A, Fernhall B, Kanaley JA. Autonomic Responses to Physiological Stressors in Women with Type 2 Diabetes. *Clin Auton Res* 18(2):66-73, 2008.
- 107. **Figueroa A**, Kingsley JD, McMillan V and Panton LB. Resistance exercise training improves heart rate variability in women with Fibromyalgia. *Clin Physiol Funct Imaging* 28 (1):49-54, 2008.
- 108. Kanaley JA, Baynard T, Franklin RM, Weinstock RS, Goulopoulou S, Carhart R, Ploutz-Snyder R, **Figueroa A**, Fernhall B. The effects of a glucose load and sympathetic challenge on

autonomic function in obese women with and without type 2 diabetes. *Metabolism* 56(6):778-785, 2007.

- 109. **Figueroa A**, Baynard T, Fernhall B, Carhart R and Kanaley JA. Impaired cardiovascular autonomic modulation in middle-aged women with type 2 diabetes. *Eur J Cardiovasc Prev Rehabil* 14(2):237-243, 2007.
- 110. **Figueroa A**, Baynard T, Fernhall B, Carhart R and Kanaley JA. Endurance training improves post-exercise cardiac autonomic modulation in obese women with and without type 2 diabetes. *Eur J Appl Physiol* 100:437-444, 2007.
- 111. Goulopoulou S, Baynard T, Collier SR, Giannopoulou I, Figueroa A, Beets M, Pitetti K, 104. Fernhall B. Cardiac Autonomic Control in Individuals with Down Syndrome. Am J Ment Retard 111(1):27-34, 2006.
- 112. Heffernan KS, Baynard T, Goulopoulou S, Giannopoulou I, Collier SR, **Figueroa A**, and Fernhall B. Baroreflex Sensitivity During Static Exercise in Individuals with Down Syndrome. *Med Sci Sports Exerc* 37(12):2026-2031, 2005.
- 113. Fernhall B, **Figueroa A**, Collier S, Giannopoulou F, Goulopoulou S, Baynard T. Resting metabolic rate is not reduced in obese individuals with Down Syndrome. *Mental Retardation* 43(6):391-400, 2005.
- 114. Giannopoulou I, Fernhall B, Carhart R, Weinstock RS, Baynard T, **Figueroa A**, Kanaley JA. Effects of diet and/or exercise on the adipocytokine and inflammatory cytokine levels of postmenopausal women with type 2 diabetes. *Metabolism* 54(7):866-875, 2005.
- 115. Fernhall B, **Figueroa A**, Collier S, Baynard T, Giannopoulou I, Goulopoulou S. Blunted Heart Rate Response to Upright Tilt in Individuals with Down Syndrome. *Arch Phy. Med Rehabil* 86:813-818, 2005.
- 116. **Figueroa A**, Collier S, Baynard T, Giannopoulou F, S Goulopoulou, Fernhall B. Impaired vagal modulation of heart rate in individuals with Down syndrome. *Clin Autonom Res* 15:45-50, 2005.
- 117. Hall C, **Figueroa A**, Fernhall B, Kanaley J. Energy expenditure of walking and running: Comparison with prediction equations. *Med Sci Sports Exerc* 36:2128-2134, 2004.
- 118. Going S, Lohman T, Houtkooper L, Metcalfe L, Flint-Wagner H, Blew R, Standford V, Cussler E, Martin J, Texeira P, Harris M, Milliken L, Figueroa-Galvez A, Weber J. Effects of Exercise on Bone Mineral Density in Calcium-Replete Postmenopausal Women with and without Hormone Replacement Therapy. *Osteoporos Int* 14:637-643, 2003.
- 119. **Figueroa A**, Going SB, Milliken LA, Blew R, Sharp S, Teixeira PJ, Lohman TG. Effects of Exercise Training and Hormone Replacement Therapy on Lean and Fat Mass in Postmenopausal Women. *J Gerontol: Med Sci* 58A(3):M266-M270, 2003.
- 120. Milliken LA, Going SB, Houtkooper LB, Flint-Wagner HG, **Figueroa A**, Metcalfe LL, Blew RM, Sharp SC, Lohman TG. Effects of exercise training on bone remodeling, insulin-like growth factors and bone mineral density in post-menopausal women with and without hormone replacement therapy. Calcif Tissue Int 72(4):478-484, 2003.
- 121. **Figueroa A**, Going SB, Milliken LA, Blew R, Sharp S, Lohman TG. Body composition modulates the effects of hormone replacement therapy on growth hormone and insulin-like growth factor-I levels in postmenopausal women. *Gynecol Obstet Invest* 54 (4):201-206, 2002.

## <u>RESEARCH SUPPORT</u>: <u>External</u>

**Figueroa A (PI)**. Effects of 4 weeks of supplementation with L-citrulline and glutathione on arterial function and cardiovascular responses in healthy postmenopausal women: A pilot study. Kyowa Hakko Bio Co., LTD. \$149,932 (funded). February 2020- February 2023.

Guerra Balic M (PI), **Figueroa A** (**Co-PI**). Discapacidad intellectual, ejercicio y envejecimiento (intellectual discapacity, exercise, and aging). University Ramon Llull, Barcelona, Spain. Spanish Secretary of Economy and Competitivity. €23,000 (Euros). January 2019- 2022.

Arjmandi BH (PI), **Figueroa A** (**PI**), Johnson SA. Regular apple consumption improves cardiovascular risk factors and glycemic control in type 2 diabetics. U.S. Apple Association: \$81,522. August 2014-December 2016.

Arjmandi BH (PI), **Figueroa A** (**PI**), Johnson SA. Tart cherry improves cardiovascular risk factors associated with metabolic syndrome. Cherry Research Committee: \$60,450. May 2014- December 2016.

Arjmandi BH, **Figueroa** A (Co-PI), Feresin R. Daily incorporation of strawberries into a diet favorably improves vascular function and lowers aortic blood pressure in postmenopausal women with prehypertension. Funding Agency: U.S. California Strawberry Commission: amount \$85,037. January 2013-2015.

Arjmandi BH and **Figueroa A** (Co-PI). Daily incorporation of blueberries into a diet favorably improves vascular function and lowers aortic blood pressure in postmenopausal women with prehypertension. U.S. Highbush blueberry council: amount \$74,997. August 2011- January 2013.

**Figueroa A (PI)**. Effect of whole-body vibration training on arterial function in obese postmenopausal women. Funded by Performance Health System. Total award \$ 40,000 in Power Plate machines. November 2013.

**Figueroa A (PI)**. The effect of weight loss via diet and low-intensity resistance exercise training on arterial function in overweight/obese women. Funding agency Nutrisystem Inc: amount \$36,185. December 2010-2011.

**Figueroa A (PI)** and Arjmandi BH. Effects of watermelon supplementation on arterial stiffness and vascular inflammation in older individuals with the metabolic syndrome. Funding agency National Watermelon Promotional Board: amount \$76, 874. November 2010-2011.

**Figueroa A (PI)**, Perkins-Veazie P, Arjmandi BH. Effect of watermelon on aortic hemodynamic in older individuals with pre- and stage 1 hypertension. Funding agency National Watermelon Promotional Board: amount \$50,000. July 14, 2008-December 1, 2009.

## Internal

**Figueroa A** (PI), Delp J. Effects of 2 strength training modes on arterial function, inflammation, and walking capacity in older adults with peripheral arterial disease. Florida State University CRC-Planning Grant. \$13,000. December 2014-May 2017.

**Figueroa A**. The effects of oral L-arginine and resistance exercise training on arterial stiffness, endothelial function and vascular inflammation in postmenopausal women. Funding agency Florida State University, College of Human Sciences Research Initiation Award, 2007. \$6,000.

**Figueroa A**. The effect of resistance exercise training on arterial stiffness in middle-aged women with and without fibromyalgia. Funding agency Florida State University, College of Human Sciences Equipment Grant, 2005. \$10,000.

**Figueroa A**. The acute and chronic effect effects of resistance exercise on cardiovascular autonomic control in women with fibromyalgia. Florida State University, CRC First Year Assistant Professor Award, 2005. Amount: \$14,000.

#### SUPERVISION OF GRADUATE RESEARCH Department of Kinesiology and Sport Management, Texas Tech University Ph.D. Committees

Chair

*Mauricio Martinez*, 2019-Present. PhD Candidate. Dissertation topic: Effects of Four Weeks of L-Citrulline and L-Arginine Supplementation on Postprandial Macro- and Microvascular Endothelial Function and the Effects of Supplementation on Macro- and Microvascular Endothelial Function during Superimposed Sympathetic Activity in Post-Menopausal Prediabetic Women.

*Katherine N. Dillon*, 2020-Present. Dissertation topic: The Effects of Two Weeks of L-Citrulline on Arterial Function and Blood Pressure at Rest and During Exercise in Hypertensive Postmenopausal Women.

*Yejin Kang*, 2020-Present. Dissertation topic: Resistance Training and Citrulline Supplementation for Improving Vascular Function and Muscle Mass in Type 2 Diabetes.

*Arun Maharaj*, 2018-2022. <u>Dissertation topic</u>: Effects of L-Citrulline supplementation and lowintensity resistance exercise training on vascular function, body composition, and muscle strength in hypertensive postmenopausal women.

*Stephen M. Fischer*, 2018-2022. <u>Dissertation topic</u>: The effects of four weeks of L-citrulline supplementation on endothelial function and sympatho-excitation using dynamic handgrip exercise and the cold pressor test in obese hypertensive postmenopausal women.

## Committee Member

*Hyoseon Kim*. 2019-Present. <u>Dissertation topic</u>: Effects of enhancing mitophagy on disease activities and endothelial function in SLE (Systemic Lupus Erythematosus).

M.S. Committees <u>Chair</u> Brandon W. Dalton, 2020-2023. Non-Thesis.

Committee Member

**Jacob Dellinger**, 2021-23. Thesis topic: Impact of sleep regularity on skeletal muscle oxygenation changes during cycling exercise.

## **Department of Nutrition, Food, and Exercise sciences, Florida State University Ph.D. Committees**

#### <u>Chair</u>

*J. Derek Kingsley*, 2004-2009. <u>Dissertation Topic</u>: acute and chronic effects of resistance exercise on autonomic modulation and vascular function in women with fibromyalgia.

*Marcos A. Sanchez-Gonzalez*, 2008-2012. <u>Dissertation Topic</u>: The effect of L-citrulline supplementation on aortic hemodynamics and autonomic responses to cold exposure and isometric exercise.

*Alexei Wong*, 2009-2014. <u>Dissertation Topic</u>: The effect of 8 weeks of whole body vibration training combined with L-citrulline supplementation on arterial stiffness, wave reflection, hemodynamics and body composition in postmenopausal women.

*Salvador J. Jaime*, 2013-2017. <u>Dissertation Topic</u>: The effects of twelve weeks of whole-body vibration training and low-intensity resistance exercise training on arterial function, muscle strength, and physical performance in dynapenic postmenopausal women.

#### Committee Member

*Zahra Ezzat-Zadeh*, 2010-2012. <u>Dissertation Topic</u>: The underlying mechanisms by which estrogen regulates body composition including bone and muscle mass.

*Rafaela Ferresin*, 2011-2015. <u>Dissertation Topic:</u> Incorporation of strawberries to the diet improves skeletal health in postmenopausal women.

*Brandon Grubbs*, 2012-2017. <u>Dissertation Topic</u>: Effects of power training and whole body vibration training in older adults.

*Justin Mason*, 2013-2017. <u>Dissertation Topic:</u> The effects of cardiovascular health on cognitive function and driving performance among healthy older adults.

*Neda Akhavan*, 2014-present. <u>Dissertation Topic</u>: The health benefits of daily apple consumption on factors associated with glycemic control, insulin sensitivity, and cardiovascular health in individuals with pre-diabetes and type II diabetes mellitus.

## **MS Committees**

<u>Chair</u>

*Ryan Gil,* 2008-2010. <u>Thesis Topic</u>: The effect of whole-body vibration training on arterial and autonomic function in young overweight/obese women.

Julian A. Trivino, 2008-2010. Non-thesis.

*Roy Kalfon,* 2011-2014. <u>Thesis Topic</u>: The effect of L-citrulline supplementation on vascular and cardiac autonomic responses to cold pressor test concurrently with post-exercise muscle ischemia.

*Stacey Alvarez-Alvarado*, 2102-2014. <u>Thesis Topic</u>: Effects of the combination of whole-body vibration exercise and external load on arterial stiffness and blood flow in overweight/obese premenopausal women.

*Jacob Pacilio*, 2012-2014. <u>The effects of whole body vibration exercise training on arterial function in patients with coronary artery disease</u>.

#### Committee Member

*Julie Meuret*, 2005-2007. <u>Thesis Topic</u>: a comparison of effects between post exercise resting metabolic rate after thirty minutes of intermittent treadmill and resistance exercise.

*Brandon Booth*, 2007-2009. <u>Thesis Topic</u>: The effects of dried apples and resistance exercise on clinical parameters of metabolic syndrome in women with polycystic ovary syndrome.

Edward Archer, 2007-2009. Non-thesis.

Jiyao Zhang, 2009-2011.

#### William Mandler, 2009-2013.

*Arielle L. Biwer*, 2012-2014. <u>Thesis topic</u>: The effects of four-week beta-alanine supplementation on muscular performance, submaximal oxygen consumption, and body composition in Parkinson's patients.

#### **Undergraduate Students**

*Major Advisor Alvaro M. Bada*, 2007. <u>Thesis Topic</u>: Effect of oral L-arginine on aortic hemodynamics, wave reflection and autonomic responses to post-exercise muscle ischemia in resistance-trained men.

*Julian A. Trivino*, 2008. <u>Thesis Topic</u>: Effects of oral L-citrulline on cardiovascular autonomic control and aortic blood pressure responses to the cold pressor test in young men with pre-hypertension.

*Amber Ramey*, 2010. <u>Thesis Topic</u>: Effect of whole-body vibration training on arterial function in overweight/obese postmenopausal women.

*Andrew Koutnik*, 2012. <u>Thesis Topic</u>: Effect of acute passive vibration on arterial function in poststroke patients.

*Zachary I. Grunewald*, 2014. <u>Thesis Topic</u>: The effect of one-week of oral L-citrulline supplementation on the hemodynamic responses to acute caffeine ingestion in young men.

Committee Member

*Charles J. Blay,* 2012. <u>Thesis Topic</u>: The acute effects of late evening whey and casein protein ingestion on fasting blood glucose, blood lipids, resting metabolic rate, and hunger in overweight and obese individuals.

*Timothy Gooldy*, 2012. <u>Thesis Topic</u>: Neurotransmitter interactions that control high-fat food intake.

*Ryan Diaz,* 2013. <u>Thesis Topic</u>: Nucleus accumbens glucagon-like peptide 1 receptor effects on food reward.

## Syracuse University

#### **M.S.** Committees

#### Chair

*Javier A. Perez*, 2001-2003. <u>Thesis Topic</u>: a comparison between the effects of proprioceptive neuromuscular facilitation stretching, static stretching, and ballistic stretching on adaptations in flexibility.

## Department of Medical Sciences, Universidad de Guanajuato, Mexico PhD Committees

## Co-Chair

*Katya Vargas-Ortiz*, 2011-2014. <u>Dissertation topic</u>: Effect of aerobic and resistance training on Sirt3, PGC-1α and NRF1 expression in muscle of obese sedentary adolescents.

*Anaisa G. Flores-Ramirez*, 2019-Present. <u>Dissertation topic</u>: Effect of L-citrulline supplementation and implementation of aerobic exercise on vascular structure and function in adolescents with obesity and elevated arterial pressure.

## **MS Committees**

#### Co-Chair

*Veronica I. Tovar Villegas*, 2019-2022. <u>Thesis topic</u>: Efecto de la suplementacion oral de L-citrulina sobre la function hepatica e higado graso no alcoholic en adolescentes con obesidad.

*Alan A. Rodriguez Carrillo*, 2022-Present. Efecto de la suplementación con L-Citrulina y entrenamiento en intervalos de alta intensidad (HIIT) sobre la rigidez arterial en adolescentes con enfermedad de hígado graso asociada a la disfunción metabólica (MAFLD)

## Committee Member

*David Ramos-Borja*, 2016-2018. <u>Thesis topic</u>: Effect of moderate exercise on endothelial function and markers of inflammation in adults with chronic kidney diasease.

*Enrique A. Bernal-Ruiz*, 2012-2014. <u>Thesis topic</u>: Effect of aerobic training of heart rate variability in obese adolescents with insulin resistance.

## **INVITED PRESENTATIONS:**

## South Korea

1. The impact of strength training on arterial stiffness. **Integrative Medicine: Physical Activity** is a Core Tip Symposium. Busan, South Korea. June 11, 2015.

- 2. Resistance exercise and arterial function. Annual Fall Scientific Conference of the Korean Society of Lipidology and Atherosclerosis (KSLA). Seoul, South Korea. September 3, 2011.
- 3. Effects of acute and chronic resistance exercise on arterial stiffness (keynote speech). **Inje University, College of Medicine.** Busan, South Korea. September 2011.

# <u>USA</u>

- 1. Muscle strength, blood pressure, and arterial aging. Seminar series, Department of Applied Physiology & Kinesiology, University of Florida, Gainesville, FL, March 28, 2019.
- 2. Use of whole-body vibration exercise and dietary L-citrulline to improve cardiovascular and skeletal muscle health with advancing age. The Department of Exercise Science, Syracuse University, Syracuse, NY, April 18, 2016.
- 3. Can exercise reduce arterial stiffness in hypertension? SEMINAR: Contribution of arterial stiffness to the development of hypertension: from bench to bedside. American Heart Association, Chicago IL, November 18, 2014.

## <u>Spain</u>

Impact of aging and exercise training on vascular function,. Department of Psychology, Education, and Sports Sciences. Ramon Llull University, Barcelona, Spain, November 21, 2018.

## <u>Mexico</u>

- Rigidez arterial en sarcopenia, obesidad y diabetes (Arterial stiffness in sarcopenia, obesity and diabetes). XV International Reunion of Medical Sciences. Leon, Guanajuato Mexico. April 23, 2015.
- 4. Prescripción de ejercicio en el adulto mayor (Exercise prescription in older adults). XV International Reunion of Medical Sciences. Leon, Guanajuato Mexico. April 23, 2015.
- 5. Efectos de la vibracion PowerPlate sobre la salud cardiovascular (Effects of PowerPlate vibration on cardiovascular health). University of Guanajuato and Sports Commission of Guanajuato. Leon, Guanajuato Mexico. April 23, 2015.
- 6. Physical exercise: What is the daily dose for being healthy? XXI National Congress of Physicians MedigLeon, Guanajuato, Mexico. September 4, 2014.
- 7. Resistance exercise prescription (prescripcion de ejercicio con Resistencia). XXI National Congress of Physicians MedigLeon, Guanajuato, Mexico. September 3, 2014.
- 8. Muscle strength and arterial function (Fuerza muscular y funcion arterial).VI International Congress in Sports Medicine and Applied Sciences, Guanajuato, México. September 8, 2012.
- 9. Whole-body vibration exercise improves arterial function in young overweight/obese women (Entrenamiento de ejercicio con vibracion mejora funcion arterial en mujeres jovenes con sobrepeso/obesidad). VI International Congress in Sports Medicine and Applied Sciences, Guanajuato, México. September 7, 2012.
- 10. Arterial function and obesity (Función arterial y obesidad). Graduate Program in Medical Sciences, Universidad de Guanajuato, Leon-Campus, México. June 15, 2012
- Analisis de la function arterial en los ejercicios de fuerza muscular (arterial function analysis in muscle strength exercises). XIII Congreso internacional de medicina y cultura del deporte (International congress of medicine and culture of sports). Mazatlan, México. November 26, 2011.

- 12. Ejercicios de Resistencia con pesas y función arterial (resistance exercise with weight and arterial function). XIII Congreso internacional de medicina y cultura del deporte (International congress of medicine and culture of sports). Mazatlan, México. November 26, 2011.
- 13. Salud cardiovascular and resistance exercise (cardiovascular health and resistance exercise). V Congreso internacional de medicina y ciencias aplicadas al deporte (International congress of medicine and sciences applied to sports). Guanajuato, GTO, Mexico. November 25, 2012.
- 14. Effect of resistance exercise training on vascular health. XIX National Congress of Physicians. León, Guanajuato, México. August 24-27, 2011.
- 15. Prescription of resistance exercise. XIX National Congress of Physicians. León, Guanajuato, México. August 24-27, 2011.
- 16. Effects of resistance exercise on arterial function (keynote speech). XXIV Pan-American Congress of Sports Medicine, Guadalajara, Mexico. July 27-30, 2011.
- 17. Vascular effects of exercise with whole-body vibration (keynote speech). XXIV Pan-American Congress of Sports Medicine, Guadalajara, Mexico. July 27-30, 2011.
- 18. 10<sup>th</sup> Meeting of Medical Sciences. Universidad de Guanajuato, León, Guanajuato, México. April 22, 2010.
- 19. XVII International Meeting, Physical Education, Sport and Applied Sciences (Congreso Internacional, Educacion Fisica, Deportes y Ciencias Aplicadas).Universidad Autónoma de Nuevo León. October 28-30, 2009.
- 20. Universidad Autónoma de Chihuahua. Chihuahua, México. May 26-28, 2008. (keynote speech)
- II International Meeting of Medicine and Applied Sport Sciences (II Congreso Internacional de Medicina y Ciencias Aplicadas al Deporte). Comisión Estatal del Deporte y Atención a la Juventud. September 17-20, 2008.
- 22. 2° International Meeting of Physical Education Professional (Encuentro Internacional de Profesionales de la Cultura Física). Benemérita Universidad Autónoma de Puebla. Puebla, Puebla, México. September 25, 2008.
- 23. 4<sup>th</sup> International Meeting of Biotechnological Sciences (Congreso Internacional de Ciencias Biotecnología). Universidad Autónoma de Ciudad Juárez. October 27-29, 2008.
- 24. Control of the heart by the autonomic nervous system. Universidad de Guanajuato, León, Guanajuato, México. August 16-18, 2005.
- 25. Cardiovascular function and responses to exercise. Universidad de Guanajuato, León, Guanajuato, México. August 16-18, 2005.
- 26. International certification in anthropometric evaluation. Universidad de Guanajuato, León, Guanajuato, México. November 21-23, 2007.
- 27. Benefits and prescription of resistance exercise. August 14-15, 2008.International Seminar of Resistance Exercise. Comisión Estatal del Deporte y Atención a la Juventud. León, Guanajuato, México.

# **PROFESSIONAL SERVICE**

# **Editorial Board Member**

- Nutrients, Clinical Nutrition section
- Frontiers in Physiology, Exercise Physiology and Sports and Active Living sections
- Journal of Geriatric Cardiology

# **Journal Reviewer**

• American Journal of Hypertension

- American Journal of Physiology-Heart and Circulatory Physiology
- Applied Physiology, Nutrition and Metabolism
- Autonomic Neurosciences
- Blood Pressure
- British Journal of Nutrition
- Clinical and Experimental Pharmacology and Physiology
- Clinical Nutrition ESP
- Clinical Science
- European Journal of Applied Physiology
- Experimental Gerontology
- Hypertension Research
- International Journal of Obesity
- International Journal of Sports Medicine
- Journal of Applied Physiology
- Journal of Human Hypertension
- Journal of Science and Medicine in Sport
- Journal of Sport and Health Science
- Journal of the Academy of Nutrition and Dietetics
- Medicine & Science in Sports & Exercise
- Menopause
- Nutrition, Metabolism and Cardiovascular Diseases
- Scandinavian Journal of Medicine & Science in Sports
- Sports Medicine
- The Journal of Clinical Hypertension

## **Grant Reviewer:**

- Swiss National Science Foundation (2011).
- Mexican National Council of Science and Technology (CONACYT) (2016).
- National Institute of Health; National Heart, Lung and Blood Institute, Special Emphasis Panel/Scientific Review (2016).
- American Heart Association; Vascular Biology and blood pressure-Exercise Physiology group (2017).

## PROFESSIONAL MEMBERSHIPS:

- American College of Sports Medicine
- American Heart Association
- North American Artery Society
- American Physiological Society

## **TEACHING EXPERIENCE:**

## Department of Kinesiology and Sport Management, Texas Tech University

KIN3305 Exercise Physiology KIN3306 Applied Exercise Physiology KIN3368 Exercise Testing and Prescription KIN7301 Advanced Exercise Physiology I KIN7304 Special Topics in Exercise Physiology KIN7104 Seminar in Exercise Physiology

# Department of Nutrition, Food, and Exercise sciences, Florida State University

PET3322 Anatomy and Physiology I PET3932 Exercise and Disease APK3110 Applied Exercise physiology PET5930 Seminar in Movement Sciences PET6365 Exercise and the Cardiorespiratory System

#### **Department of Exercise Science, Syracuse University**

HEA337 Drug Education for Teachers PPE497 Physiology of Exercise PPE500 Body Composition and Obesity PPE515 Exercise testing and interpretation PPE785 Energy Metabolism and Exercise