

## Curriculum Vitae

### Sushant Mohan Ranadive

Department of Kinesiology, School of Public Health

## I. Personal Information

### Academic Appointments at UMD

Assistant Professor, School of Public Health, SPHL-Kinesiology. August 6, 2017 - Present.

### Educational Background

(Post-Doctoral Research). Mayo Clinic, Rochester, MN, United States. July 2012 - July 2017.

PhD. University of Illinois at Urbana-Champaign, 2012.

MS. University of Illinois at Chicago, 2007.

BS. Seth G.S. Medical College and KEM Hospital, 2005.

### Professional Certifications, Licenses, and Memberships

American Physiological Society. (2010 - Present).

Certified Clinical Exercise Physiologist, American College of Sports Medicine. (2007 - Present).

American College of Sports Medicine. (2005 - Present).

### Research Fellowships, Prizes, and Awards

Mayo Clinic Women's Health Scholar, Mayo Clinic. (2016).

Caroline Tum Suden/Fraces Hellebrandt Professional Opportunity Award, American Physiological Society. (April 2015).

Paul D. Doolen Scholarship for Biomedical Study in Aging, University of Illinois. (2011).

Robert Sprague Award for Academic Merit, University of Illinois at Urbana-Champaign. (2011).

Pre-Doctoral Fellowship, American Heart Association. (2010).

## II. Research, Scholarly, Creative and/or Professional Activities

### Refereed Journal Articles - \* denotes additional role in the project/publication

1. Harvey, R. E., **Ranadive, S. M.\***, Limberg, J. K., Baker, S. E., Nicholson, W. T., Curry, T. B., Barnes, J. N., Joyner, M. J. (2020). Forearm vasodilatation to a  $\beta_2$ -adrenergic receptor agonist in premenopausal and postmenopausal women. *Experimental physiology*. \*Role – Corresponding Author
2. Dillon, G. A., Shepherd JRA, Casey, D. P., Dinienno, F. A., Curry, T. B., Joyner, M. J., **Ranadive, S. M.\*** (2020). Rapid-onset vasodilator responses to exercise in humans: Effect of increased baseline blood flow. *Experimental physiology*, 105(1), 88-95. \*Role – Senior Author

3. Miller, K. B., Miller, V. M., Harvey, R. E., **Ranadive, S. M.\***, Joyner, M. J., Barnes, J. N. (2019). Augmented cerebral blood velocity in response to isometric handgrip exercise in women with a history of preeclampsia. *American journal of physiology. Regulatory, integrative and comparative physiology*, 317(6), R834-R839. \* **Role – Co-Investigator with Dr. Barnes**
4. Sapp, R. M., Evans, W. S., Eagan, L. E., Chesney, C. A., Zietowski, E. M., Prior, S. J., **Ranadive, S. M.\***, Hagberg, J. M. (2019). The effects of moderate and high intensity exercise on circulating markers of endothelial integrity and activation in young, healthy men. *Journal of applied physiology (Bethesda, Md. : 1985)*. \* **Role – Mentor and Co-Investigator**
5. Won, J., Alfini, A. J., Weiss, L. R., Michelson, C. S., Callow, D. D., **Ranadive, S. M.**, Gentili, R. J., Smith, J. C. (2019). Semantic Memory Activation After Acute Exercise in Healthy Older Adults. *Journal of the International Neuropsychological Society: JINS*, 25(6), 557-568.
6. **Ranadive, S. M.**, Shepherd JRA, Curry, T. B., Dinenno, F. A., Joyner, M. J. (2019). Sustained exercise hyperemia during prolonged adenosine infusion in humans. *Physiological reports*, 7(4), e14009.
7. Schroeder, E. C., **Ranadive, S. M.**, Yan, H., Lane-Cordova, A. D., Kappus, R. M., Cook, M. D., Fernhall, B. (2019). Effect of acute maximal exercise on vasodilatory function and arterial stiffness in African-American and white adults. *Journal of hypertension*.
8. Wee, S. O., Yan, H., Lane-Cordova, A., **Ranadive, S. M.**, Rosenberg, A. J., White, D. W., Fernhall, B. (2019). Sex Differences in Aortic Hemodynamics Following Acute Exercise: Wave Separation Analysis. *International journal of sports medicine*, 40(1), 23-30.
9. Schroeder, E. C., Lane-Cordova, A. D., **Ranadive, S. M.**, Baynard, T., Fernhall, B. (2018). Influence of fitness and age on the endothelial response to acute inflammation. *Experimental physiology*, 103(6), 924-931.
10. van Helmond, N., Johnson, B. D., Holbein, W. W., Petersen-Jones, H. G., Harvey, R. E., **Ranadive, S. M.**, Barnes, J. N., Curry, T. B., Convertino, V. A., Joyner, M. J. (2018). Effect of acute hypoxemia on cerebral blood flow velocity control during lower body negative pressure. *Physiological reports*, 6(4).
11. Johnson, B. D., Peinado, A. B., **Ranadive, S. M.**, Curry, T. B., Joyner, M. J. (2018). Effects of intravenous low-dose dopamine infusion on glucose regulation during prolonged aerobic exercise. *American journal of physiology. Regulatory, integrative and comparative physiology*, 314(1), R49-R57.
12. Shafer, B. M., **Ranadive, S.**, Baynard, T., Motl, R. W., Fernhall, B. (2017). The implications of poor sleep quality on arterial health in persons with multiple sclerosis. *ARTERY RESEARCH*, 19, 49-55.
13. Schroeder, E. C., **Ranadive, S.**, Heffernan, K. S., Jae, S. Y., Fernhall, B. (2017). The acute effect of maximal aerobic and isometric exercise on arterial stiffness parameters in boys and men. *ARTERY RESEARCH*, 19, 24-28.
14. Harvey, R. E., Johnson, M. C., **Ranadive, S. M.\***, Joyner, M. J., Lahr, B. D., Miller, V. M., Barnes, J. N. (2017). Aortic hemodynamics in postmenopausal women following cessation of hormone therapy. *Physiological reports*, 5(23). \* **Role – Co-Mentor to primary author**
15. **Ranadive, S. M.**, Eugene, A. R., Dillon, G., Nicholson, W. T., Joyner, M. J. (2017). Comparison of the vasodilatory effects of sodium nitroprusside vs. nitroglycerin. *Journal of applied physiology*, 123(2), 402-406.
16. Bunsawat, K., **Ranadive, S. M.**, Lane-Cordova, A. D., Yan, H., Kappus, R. M., Fernhall, B., Baynard, T. (2017). The effect of acute maximal exercise on postexercise hemodynamics and central arterial stiffness in obese and normal-weight individuals. *Physiological reports*, 5(7).

17. Yan, H., **Ranadive, S. M.**, Lane-Cordova, A. D., Kappus, R. M., Behun, M. A., Cook, M. D., Woods, J. A. et al. (2017). Effect of acute aerobic exercise and histamine receptor blockade on arterial stiffness in African Americans and Caucasians. *Journal of applied physiology (Bethesda, Md. : 1985)*, 122(2), 386-395.
18. **Ranadive, S. M.**, Harvey, R. E., Lahr, B. D., Miller, V. M., Joyner, M. J., Barnes, J. N. (2017). Sympathetic responsiveness is not increased in women with a history of hypertensive pregnancy. *American journal of physiology. Regulatory, integrative and comparative physiology*, 312(1), R49-R54.
19. Shepherd, J. R., Al-Khateeb, A. A., Dillon, G. A., **Ranadive, S. M.**, Limberg, J. K. (2016). Harder, better, faster, longer? Investigating the physiological threshold of endurance exercise. *The Journal of physiology*, 594(24), 7175-7176.
20. Lane-Cordova, A. D., **Ranadive, S. M.**, Kappus, R. M., Cook, M. D., Phillips, S. A., Woods, J. A., Wilund, K. R., Baynard, T., Fernhall, B. (2016). Aging, not age-associated inflammation, determines blood pressure and endothelial responses to acute inflammation. *Journal of hypertension*, 34(12), 2402-2409.
21. Baker, S. E., Limberg, J. K., **Ranadive, S. M.**, Joyner, M. J. (2016). Neurovascular control of blood pressure is influenced by aging, sex, and sex hormones. *American journal of physiology. Regulatory, integrative and comparative physiology*, 311(6), R1271-R1275.
22. Shepherd, J. R., Joyner, M. J., Dinienno, F. A., Curry, T. B., **Ranadive, S. M.** (2016). Prolonged adenosine triphosphate infusion and exercise hyperemia in humans. *Journal of applied physiology*, 121(3), 629-35.
23. Yan, H., Behun, M. A., Cook, M. D., **Ranadive, S. M.**, Lane-Cordova, A. D., Kappus, R. M., Woods, J. A. et al. (2016). Differential Post-Exercise Blood Pressure Responses between Blacks and Caucasians. *PloS one*, 11(4), e0153445.
24. Sun, P., Yan, H., **Ranadive, S. M.**, Lane, A. D., Kappus, R. M., Bunsawat, K., Baynard, T., Hu, M., Li, S., Fernhall, B. (2016). Autonomic Recovery Is Delayed in Chinese Compared with Caucasian following Treadmill Exercise. *PloS one*, 11(1), e0147104.
25. Limberg, J. K., Johnson, B. D., Holbein, W. W., **Ranadive, S. M.**, Mozer, M. T., Joyner, M. J. (2016). Interindividual variability in the dose-specific effect of dopamine on carotid chemoreceptor sensitivity to hypoxia. *Journal of applied physiology (Bethesda, Md. : 1985)*, 120(2), 138-47.
26. **Ranadive, S. M.**, Yan, H., Lane, A. D., Kappus, R. M., Cook, M. D., Sun, P., Harvey, I. et al. (2016). Aerobic Exercise Training and Arterial Changes in African Americans versus Caucasians. *Medicine and science in sports and exercise*, 48(1), 90-7.
27. Lane-Cordova, A. D., **Ranadive, S. M.**, Yan, H., Kappus, R. M., Sun, P., Bunsawat, K., Smith, D. L., Horn, G. P., Ploutz-Snyder, R., Fernhall, B. O. (2015). Effect of Aspirin Supplementation on Hemodynamics in Older Firefighters. *Medicine and science in sports and exercise*, 47(12), 2653-9.
28. Kappus, R. M., **Ranadive, S. M.**, Yan, H., Lane-Cordova, A. D., Cook, M. D., Sun, P., Harvey, I. S., Wilund, K. R., Woods, J. A., Fernhall, B. (2015). Sex differences in autonomic function following maximal exercise. *Biology of sex differences*, 6, 28.
29. Smith, D. L., DeBlois, J. P., Wharton, M., Fehling, P. C., **Ranadive, S. M.** (2015). Effect of moderate exercise-induced heat stress on carotid wave intensity. *European journal of applied physiology*, 115(10), 2223-30.
30. Casey, D. P., **Ranadive, S. M.**, Joyner, M. J. (2015). Aging is associated with altered vasodilator kinetics in dynamically contracting muscle: role of nitric oxide. *Journal of applied physiology*, 119(3), 232-41.

31. Lane, A. D., Kappus, R. M., Bunsawat, K., **Ranadive, S. M.**, Yan, H., Phillips, S., Baynard, T., Woods, J. A., Motl, R., Fernhall, B. (2015). Age-related ventricular-vascular coupling during acute inflammation in humans: Effect of physical activity. *European journal of preventive cardiology*, 22(7), 904-11.
32. Sun, P., Yan, H., **Ranadive, S. M.**, Lane, A. D., Kappus, R. M., Bunsawat, K., Baynard, T., Li, S., Fernhall, B. (2015). Blood pressure changes following aerobic exercise in Caucasian and Chinese descendants. *International journal of sports medicine*, 36(3), 189-96.
33. Yan, H., **Ranadive, S.**, Heffernan, K. S., Lane, A. D., Kappus, R. M., Cook, M. D., Wu, P.-T. et al. (2014). Hemodynamic and arterial stiffness differences between African-Americans and Caucasians after maximal exercise. *AMERICAN JOURNAL OF PHYSIOLOGY-HEART AND CIRCULATORY PHYSIOLOGY*, 306(1), H60-H68.
34. Agiovlasitis, S., Rossow, L. M., Yan, H., **Ranadive, S.**, Fahs, C. A., Motl, R. W., Fernhall, B. (2014). Predicting METs from the heart rate index in persons with Down syndrome. *RESEARCH IN DEVELOPMENTAL DISABILITIES*, 35(10), 2423-2429.
35. **Ranadive, S.**, Cook, M., Kappus, R. M., Yan, H., Lane, A. D., Woods, J. A., Wilund, K. R. et al. (2014). Effect of Acute Aerobic Exercise on Vaccine Efficacy in Older Adults. *MEDICINE AND SCIENCE IN SPORTS AND EXERCISE*, 46(3), 455-461.
36. **Ranadive, S.**, Joyner, M. J., Walker, B. G., Taylor, J. L., Casey, D. P. (2014). Effect of vitamin C on hyperoxia-induced vasoconstriction in exercising skeletal muscle. *JOURNAL OF APPLIED PHYSIOLOGY*, 117(10), 1207-1211.
37. **Ranadive, S.**, Kappus, R. M., Cook, M. D., Yan, H., Lane, A. D., Woods, J. A., Wilund, K. R. et al. (2014). Effect of acute moderate exercise on induced inflammation and arterial function in older adults. *EXPERIMENTAL PHYSIOLOGY*, 99(4), 729-739.
38. Lane, A. D., Yan, H., **Ranadive, S. M.**, Kappus, R. M., Sun, P., Cook, M. D., Harvey, I., Woods, J., Wilund, K., Fernhall, B. (2014). Sex differences in ventricular-vascular coupling following endurance training. *European journal of applied physiology*, 114(12), 2597-606.
39. Kistler, B. M., Fitschen, P. J., **Ranadive, S. M.**, Fernhall, B., Wilund, K. R. (2014). Case study: Natural bodybuilding contest preparation. *International journal of sport nutrition and exercise metabolism*, 24(6), 694-700.
40. Yan, H., Prista, A., **Ranadive, S. M.**, Damasceno, A., Caupers, P., Kanaley, J. A., Fernhall, B. (2014). Effect of Aerobic Training on Glucose Control and Blood Pressure in T2DDM East African Males. *ISRN endocrinology*, 2014, 864897.
41. Lane, A. D., Wu, P.-T., Kistler, B., Fitschen, P., Tomayko, E., Jeong, J.-H., Chung, H. R. et al. (2013). Arterial Stiffness and Walk Time in Patients with End-Stage Renal Disease. *KIDNEY & BLOOD PRESSURE RESEARCH*, 37(2-3), 142-150.
42. Ward, C. L., Suh, Y., Lane, A. D., Yan, H., **Ranadive, S.**, Fernhall, B., Motl, R. W., Evans, E. M. (2013). Body composition and physical function in women with multiple sclerosis. *JOURNAL OF REHABILITATION RESEARCH AND DEVELOPMENT*, 50(8), 1139-1147.
43. Casey, D. P., Walker, B. G., **Ranadive, S.**, Taylor, J. L., Joyner, M. J. (2013). Contribution of nitric oxide in the contraction-induced rapid vasodilation in young and older adults. *JOURNAL OF APPLIED PHYSIOLOGY*, 115(4), 446-455.
44. Kappus, R. M., **Ranadive, S.**, Yan, H., Lane, A. D., Cook, M. D., Hall, G., Harvey, I. S., Wilund, K. R., Woods, J. A., Fernhall, B. (2013). Validity of predicting left ventricular end systolic pressure changes following an acute bout of exercise. *JOURNAL OF SCIENCE AND MEDICINE IN SPORT*, 16(1), 71-75.

45. Hu, M., Yan, H., **Ranadive, S. M.**, Agiovlasitis, S., Fahs, C. A., Atiq, M., Atique, N., Fernhall, B. (2013). Arterial stiffness response to exercise in persons with and without Down syndrome. *Research in developmental disabilities*, 34(10), 3139-47.
46. Lane, A. D., **Ranadive, S. M.**, Yan, H., Kappus, R. M., Cook, M. D., Sun, P., Woods, J. A., Wilund, K., Fernhall, B. (2013). Effect of sex on wasted left ventricular effort following maximal exercise. *International journal of sports medicine*, 34(9), 770-6.
47. Fahs, C. A., Rossow, L. M., Yan, H., **Ranadive, S. M.**, Agiovlasitis, S., Wilund, K. R., Baynard, T., Fernhall, B. (2013). Resting and post exercise arterial-ventricular coupling in endurance-trained men and women. *Journal of human hypertension*, 27(9), 552-6.
48. Yan, H., Fahs, C. A., **Ranadive, S.**, Rossow, L. M., Lane, A. D., Agiovlasitis, S., Echols, G. et al. (2012). Evaluation of carotid wave intensity in firefighters following firefighting. *EUROPEAN JOURNAL OF APPLIED PHYSIOLOGY*, 112(7), 2385-2391.
49. **Ranadive, S.**, Yan, H., Weikert, M., Lane, A. D., Linden, M. A., Baynard, T., Motl, R. W., Fernhall, B. (2012). Vascular Dysfunction and Physical Activity in Multiple Sclerosis. *MEDICINE AND SCIENCE IN SPORTS AND EXERCISE*, 44(2), 238-243.
50. Lane, A. D., Heffernan, K. S., Rossow, L. M., Fahs, C. A., **Ranadive, S. M.**, Yan, H., Baynard, T., Wilund, K., Fernhall, B. (2012). Aortic reservoir function, estimated myocardial demand and coronary perfusion pressure following steady-state and interval exercise. *Clinical physiology and functional imaging*, 32(5), 353-60.
51. **Ranadive, S. M.**, Fahs, C. A., Yan, H., Rossow, L. M., Agiovlasitis, S., Fernhall, B. (2012). Comparison of the acute impact of maximal arm and leg aerobic exercise on arterial stiffness. *European journal of applied physiology*, 112(7), 2631-5.
52. Fahs, C. A., Yan, H., **Ranadive, S.**, Rossow, L. M., Agiovlasitis, S., Echols, G., Smith, D. et al. (2011). Acute effects of firefighting on arterial stiffness and blood flow. *VASCULAR MEDICINE*, 16(2), 113-118.
53. Heffernan, K. S., **Ranadive, S.**, Weikert, M., Lane, A., Yan, H., Fernhall, B., Motl, R. W. (2011). Pulse pressure is associated with walking impairment in multiple sclerosis. *JOURNAL OF THE NEUROLOGICAL SCIENCES*, 309(1-2), 105-109.
54. Agiovlasitis, S., Motl, R. W., **Ranadive, S.**, Fahs, C. A., Yan, H., Echols, G. H., Rossow, L., Fernhall, B. (2011). Energetic optimization during over-ground walking in people with and without Down syndrome. *GAIT & POSTURE*, 33(4), 630-634.
55. Agiovlasitis, S., Motl, R. W., **Ranadive, S.**, Fahs, C. A., Yan, H., Echols, G. H., Rossow, L., Fernhall, B. (2011). Prediction of oxygen uptake during over-ground walking in people with and without Down syndrome. *EUROPEAN JOURNAL OF APPLIED PHYSIOLOGY*, 111(8), 1739-1745.
56. **Ranadive, S.**, Fahs, C. A., Yan, H., Rossow, L. M., Agiovlasitis, S., Fernhall, B. (2011). Heart rate recovery following maximal arm and leg-ergometry. *CLINICAL AUTONOMIC RESEARCH*, 21(2), 117-120.
57. Agiovlasitis, S., Motl, R. W., Fahs, C. A., **Ranadive, S. M.**, Yan, H., Echols, G. H., Rossow, L., Fernhall, B. (2011). Metabolic rate and accelerometer output during walking in people with Down syndrome. *Medicine and science in sports and exercise*, 43(7), 1322-7.
58. Agiovlasitis, S., Heffernan, K. S., Jae, S. Y., **Ranadive, S. M.**, Lee, M., Mojtabaei, M. C., Fernhall, B. (2010). Effects of paraplegia on cardiac autonomic regulation during static exercise. *American journal of physical medicine & rehabilitation*, 89(10), 817-23.

59. Beets, M. W., Agiovlasitis, S., Fahs, C. A., **Ranadive, S. M.**, Fernhall, B. (2010). Adjusting step count recommendations for anthropometric variations in leg length. *Journal of science and medicine in sport*, 13(5), 509-12.
60. Rossow, L., Yan, H., Fahs, C. A., **Ranadive, S. M.**, Agiovlasitis, S., Wilund, K. R., Baynard, T., Fernhall, B. (2010). Postexercise hypotension in an endurance-trained population of men and women following high-intensity interval and steady-state cycling. *American journal of hypertension*, 23(4), 358-67.
61. Heffernan, K. S., Fahs, C. A., **Ranadive, S. M.**, Patvardhan, E. A. (2010). L-arginine as a nutritional prophylaxis against vascular endothelial dysfunction with aging. *Journal of cardiovascular pharmacology and therapeutics*, 15(1), 17-23.

#### Published Conference Proceedings

**Ranadive, S.**, Dillon, G. A., Joyner, M. (2018). *Acute Estrogen Does Not Augment the beta(2) - Adrenergic Receptor Mediated Vasodilation in Postmenopausal Women* (1st ed., vol. 32).

Schroeder, E. C., Lane-Cordova, A. D., **Ranadive, S.**, Baynard, T., Fernhall, B. (2017). *High Fit Older Adults Maintain a Similar Endothelial Response to Acute Inflammation as Younger Adults* (5th ed., vol. 49, pp. 813-813).

Dillon, G. A., **Ranadive, S.**, Joyner, M. J., Eugene, A. R., Tasaki, K. M., Noble, D. M. (2017). *Effects of Glycyrrhetic Acid and other Chemical Components of Shakuyakukanzoto on Cutaneous Microcirculation in Humans* (vol. 31).

Shepherd, John R. A., Joyner, M. J., Dillon, G. A., Dinenno, F. A., Curry, T. B., **Ranadive, S.** (2017). *The Effect of Exogenous Adenosine Triphosphate on Blood Flow Kinetics During Dynamic Forearm Exercise* (vol. 31).

**Ranadive, S.**, Dillon, G. A., Shepherd, J.-R. A., Wolhart, S. C., Dinenno, F. A., Curry, T. B., Joyner, M. J. (2017). *Effect of Nitric Oxide Synthase Inhibition on Plasma ATP during Hypoxia and Exercise Induced Vasodilation in Humans* (vol. 31).

Dillon, G., Shepherd, J.-R., Dinenno, F., Curry, T., Joyner, M., **Ranadive, S.** (2016). *The Role of Prolonged Adenosine Triphosphate Infusion on Rapid Onset Vasodilation* (vol. 30).

Harvey, R. E., Johnson, M., **Ranadive, S.**, Joyner, M. J., Miller, V. M., Barnes, J. N. (2016). *Aortic Hemodynamics in Postmenopausal Women Following Cessation of Hormone Therapy* (vol. 53, pp. 56-56).

Shepherd, John R. A., Joyner, M. J., Dinenno, F. A., Curry, T. B., Dillon, G. A., **Ranadive, S.** (2016). *Prolonged Sodium Nitroprusside Infusion and Exercise Hyperemia* (vol. 53, pp. 18-18).

Shepherd, John Roger Alden, Joyner, M. J., Dinenno, F. A., Curry, T. B., **Ranadive, S.** (2016). *Prolonged Adenosine Triphosphate Infusion & Exercise Hyperemia* (vol. 30).

**Ranadive, S.**, Lalia, A. Z., Joyner, M. J., Lerman, A., Chang, A. Y. (2016). *Associations of Peripheral Endothelial Function and Arterial Stiffness with Measurements of Glucose Tolerance and Metabolic Dysfunction in Obese Women with Polycystic Ovary Syndrome* (9th ed., vol. 25, pp. 970-970).

**Ranadive, S.**, Dillon, G., Shepherd, J.-R., Eugene, A. R., Joyner, M. J. (2016). *Comparison of Forearm Vasodilator Effects Between Nitroglycerin and Sodium Nitroprusside* (vol. 53, pp. 61-61).

**Ranadive, S.**, Shepherd, J.-R. M., Dinenno, F., Curry, T., Joyner, M. (2016). *Effect of Prolonged Adenosine Infusion on Resting Forearm Vasodilatory Responses and Exercise Hyperemia* (vol. 30).

Shepherd, J., Harvey, R., **Ranadive, S.**, Miller, V., Joyner, M., Barnes, J. (2015). *Aortic Pulse Wave Characteristics In Postmenopausal Women With And Without A History Of Hypertensive Pregnancy* (vol. 29).

Wee, S. O., **Ranadive, S.**, Kappus, R. M., Cook, M. D., Yan, H., Lane-Cordova, A. D., Fernhall, B. (2015). *Hemodynamic Responses Following acute inflammation in Older adults: Wave Separation Analysis* (5th ed., vol. 47, pp. 54-55).

**Ranadive, S.**, Harvey, R., Miller, V., Joyner, M., Barnes, J. (2015). *Blood Pressure Responses to Isometric Handgrip in Women With and Without a History of Hypertensive Pregnancy* (vol. 29).

Baynard, T., **Ranadive, S.**, Lane, A., Yan, H., Kappus, R., Fernhall, B. (2015). *Differential Response in Arterial Stiffness Measures Between Obese and Normal Weight Individuals* (vol. 29).

Rosenberg, A., Wee, T., **Ranadive, S.**, Lane, A., Kappus, R., Yan, H., Fernhall, B. (2014). *Racial Differences In Pressure Wave Separation Responses Following An 8 Week Endurance Training Program* (5th ed., vol. 46, pp. 338-339).

Yan, H., **Ranadive, S.**, Lane, A. D., Kappus, R. M., Behun, M. A., Fernhall, B. (2014). *Racial Differences In Cardiac Response Following An Acute Bout Of Aerobic Exercise* (5th ed., vol. 46, pp. 861-861).

Kappus, R. M., **Ranadive, S.**, Yan, H., Lane, A. D., Cook, M. D., Wilund, K. R., Woods, J. A., Fernhall, B. (2014). *Racial Differences In Forearm Blood Flow With Maximal Exercise Before And After Aerobic Training* (5th ed., vol. 46, pp. 11-11).

Kruse, S., **Ranadive, S.**, Taylor, J., Joyner, M., Barnes, J. (2014). *Age-related differences in carotid and cerebral blood flow regulation* (1st ed., vol. 28).

**Ranadive, S.**, Joyner, M. J., Walker, B. G., Taylor, J. L., Casey, D. P. (2014). *Effect of Vitamin C on Hyperoxia Induced Vasodilation in Exercising Skeletal Muscle* (5th ed., vol. 46, pp. 13-13).

**Ranadive, S.**, Joyner, M., Walker, B., Taylor, J., Casey, D. (2014). *Effect of hyperoxia on contraction-induced forearm blood flow dynamics in young healthy adults* (1st ed., vol. 28).

Wee, Sang Ouk T., Rosenberg, A., **Ranadive, S.**, Lane, A., Kappus, R. M., Fernhall, B., Yan, H. (2014). *Sex Differences in Hemodynamic Responses Following 8 Weeks of Aerobic Exercise Training* (5th ed., vol. 46, pp. 666-666).

Lane, A. D., Kappus, R., Bunsawat, K., **Ranadive, S.**, Yan, H., Phillips, S., Motl, R., Woods, J., Baynard, T., Fernhall, B. (2013). *Effects of Acute, Induced Inflammation on Cardiovascular Function* (5th ed., vol. 45, pp. 34-34).

Rosenberg, A., Hu, M., Yan, H., **Ranadive, S.**, Agiovlasitis, S., Fahs, C., Atiq, M., Atique, N., Fernhall, B. (2013). *Arterial Stiffness Response to Exercise in Persons With and Without Down Syndrome* (5th ed., vol. 45, pp. 514-514).

Kistler, B. M., Fitschen, P. J., **Ranadive, S.**, Fernhall, B., Wilund, K. R. (2013). *Physiological Changes in Natural Male Bodybuilder During Contest Preparation: A Case Study* (5th ed., vol. 45, pp. 550-550).

Casey, D. P., Walker, B. G., **Ranadive, S.**, Taylor, J. L., Joyner, M. J. (2013). *Contribution of nitric oxide in the contraction-induced rapid vasodilation in young and older adults* (vol. 27).

Yan, H., Fahs, C. A., **Ranadive, S.**, Rossow, L. M., Agiovlasitis, S., Lane, A. D., Smith, D., Horn, G., Rowland, T., Fernhall, B. (2013). *Decreased Electro-mechanical Delay in the Left Ventricle in Firefighters Following Firefighting* (5th ed., vol. 45, pp. 452-453).

- Kappus, R. M., **Ranadive, S.**, Yan, H., Lane, A. D., Cook, M. D., Wilund, K. R., Woods, J. A., Fernhall, B. (2013). *Racial Differences in Blood Pressure Variability, Baroreflex Sensitivity and Heart Rate Variability Following Maximal Exercise* (vol. 27).
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- Yan, H., **Ranadive, S.**, Sun, P., Lane, A. D., Kappus, R. M., Fahs, C. A., Rossow, L., Fernhall, B. (2012). *Racial Differences in Blood Pressure after Exercise in Young Individuals* (vol. 26).
- Bunsawat, K., Sun, P., Yan, H., **Ranadive, S.**, Kappus, R. M., Lane, A., Baynard, T., Fernhall, B. (2012). *Sex Affects Autonomic Recovery Following A 45-min Bout Of Aerobic Exercise* (vol. 44, pp. 879-880).
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- Kappus, R. M., **Ranadive, S.**, Yan, H., Lane, A. D., Cook, M. D., Hall, G., Harvey, I. S. et al. (2012). *End Systolic Pressure Changes Following an Acute Bout of Exercise in African Americans and Caucasians* (vol. 27, pp. 455-455).
- Kappus, R. M., **Ranadive, S.**, Yan, H., Lane, A. D., Cook, M. D., Wilund, K., Woods, J. A., Fernhall, B. (2012). *Sex Differences in Blood Pressure Variability and Baroreflex Sensitivity Following 8 Weeks of Endurance Training* (vol. 44, pp. 380-381).
- Ranadive, S.**, Yan, H., Lane, A. D., Sun, P., Kappus, R., Cook, M. D., Fernhall, B. (2012). *Racial Difference in Central Stiffness and Arterial Structure following Aerobic Exercise Training* (vol. 26).
- Ranadive, S.**, Yan, H., Lane, A. D., Sun, P., Kappus, R., Cook, M. D., Fernhall, B. (2012). *Racial Differences in Blood Pressure Response and Vascular Function following 8-weeks of Aerobic Training* (vol. 44, pp. 727-727).
- Ranadive, S.**, Yan, H., Lane, A., Weikert, M., Suh, Y., Linden, M. A., Cook, M. D., Motl, R. W., Fernhall, B. (2012). *Vascular Dysfunction and Physical Activity in Multiple Sclerosis* (vol. 27, pp. 650-650).

- Lane, A. D., Fahs, C., Yan, H., Rossow, L., **Ranadive, S.**, Agiovlastis, S., Horn, G., Smith, D., Rowland, T., Fernhall, B. (2011). *Acute Vascular Changes Following Prolonged Live Firefighting* (5th ed., vol. 43, pp. 734-734).
- Lane, A. D., Yan, H., **Ranadive, S.**, Kappus, R., Hall, G., Harvey, I. S., Wilund, K., Woods, J., Fernhall, B. (2011). *Gender Affects Blood Pressure, But Not Wasted Left Ventricular Effort Following Maximal Exercise* (vol. 25).
- Ward, C. L., Weikert, M., Suh, Y., Lane, A. D., Yan, H., **Ranadive, S.**, Fernhall, B., Motl, R. W., Evans, E. M. (2011). *Body Composition and Physical Function in Individuals with Multiple Sclerosis and Age-BMI Matched Controls* (5th ed., vol. 43, pp. 443-443).
- Yan, H., Fahs, C. A., **Ranadive, S.**, Rossow, L. M., Agiovlasitis, S., Agiovlasitis, S., Lane, A. D. et al. (2011). *Evaluation of Carotid Wave Intensity in Firefighters Following Firefighting* (5th ed., vol. 43, pp. 733-734).
- Yan, H., **Ranadive, S.**, Lane, A. D., Scott, Q., Cook, M. D., Hall, G., Harvey, S. I., Fernhall, B. (2011). *Sex Differences in Arterial Stiffness after Exercise in Young Individuals* (vol. 25).
- Sun, P., Lane, A. D., **Ranadive, S.**, Yan, H., Kappus, R. M., Cook, M., Mendonca, G. V., Fernhall, B. (2011). *End Systolic Pressure Change Following Acute Isometric Exercise* (vol. 25).
- Sun, P., Yan, H., **Ranadive, S.**, Lane, A. D., Kappus, R. M., Cook, M., Hall, G. et al. (2011). *Effect of Acute Aerobic Exercise on Arterial Stiffness in African Americans and Caucasians* (5th ed., vol. 43, pp. 450-451).
- Kappus, R. M., **Ranadive, S.**, Yan, H., Lane, A. D., Cook, M. D., Hall, G., Harvey, I. S. et al. (2011). *End Systolic Pressure Changes Following an Acute Bout of Exercise in African Americans and Caucasians* (5th ed., vol. 43, pp. 455-455).
- Ranadive, S.**, Yan, H., Lane, A., Weikert, M., Suh, Y., Linden, M. A., Cook, M. D., Motl, R. W., Fernhall, B. (2011). *Vascular Dysfunction and Physical Activity in Multiple Sclerosis* (5th ed., vol. 43, pp. 650-650).
- Lane, A. D., Rossow, L., Fahs, C., Baynard, T., Wilund, K., Yan, H., **Ranadive, S.**, Agiovlastis, S., Fernhall, B. (2010). *Aortic Reservoir Function is Attenuated Following Acute Endurance and Interval Exercise* (5th ed., vol. 42, pp. 305-306).
- Fernhall, B., Fahs, C., Agiovlastis, S., **Ranadive, S.**, Yan, H., Rossow, L., Horn, G., Smith, D., Rowland, T. (2010). *Effect of Vitamin C on Cardiac Performance Following Live Firefighting* (21st ed., vol. 122).
- Fahs, C., Rossow, L., Yan, H., **Ranadive, S.**, Agiovlastis, S., Baynard, T., Wilund, K. R., Fernhall, B. (2010). *Effective Arterial Elastance Response Differs Between Young Trained Men and Women Following Acute Endurance Exercise* (5th ed., vol. 42, pp. 541-541).
- Yan, H., Rossow, L., Fahs, C., **Ranadive, S.**, Agiovlastis, S., Baynard, T., Wilund, K., Fernhall, B. (2010). *Cardiovascular Autonomic Modulation after Acute High Intensity Interval versus Aerobic Exercise* (5th ed., vol. 42, pp. 629-629).
- Rossow, L., Yan, H., Fahs, C. A., **Ranadive, S.**, Agiovlastis, S., Wilund, K. R., Baynard, T., Fernhall, B. (2010). *Postexercise Hypotension In An Endurance-trained Population Of Men And Women Following High-intensity Interval And Steady-state Cycling* (5th ed., vol. 42, pp. 29-29).

Agiovlasitis, S., Motl, R. W., Fahs, C. A., **Ranadive, S.**, Yan, H., Echols, G. H., Rossow, L., Fernhall, B. (2010). *Accelerometry-determined Physical Activity Cut-offs in Individuals With and Without Down Syndrome* (5th ed., vol. 42, pp. 476-476).

**Ranadive, S.**, Jae, S. Y., Heffernan, K., Agiovlasitis, S., Lee, M., Woods, J., Baynard, T., Fernhall, B. (2010). *Total Arterial Compliance and Haemodynamic Responses in Older Adults Following Single Isometric Handgrip Exercise Bout* (5th ed., vol. 42, pp. 543-543).

### Conferences, Workshops, and Talks

#### Refereed Posters

Ranadive, S., Office of Women's Health, "Associations of peripheral endothelial function and arterial stiffness with measurements of glucose tolerance and metabolic dysfunction in obese women with polycystic ovary syndrome," NIH. (2016).

Ranadive, S., North American Artery, "Comparison of forearm vasodilator effects between nitroglycerin and sodium nitroprusside." (2016).

Ranadive, S., Experimental Biology, "Blood pressure responses to isometric handgrip in women with and without a history of hypertensive pregnancy," American Physiological Society. (2015).

Ranadive, S., Experimental Biology, "Effect of hyperoxia on contraction-induced forearm blood flow dynamics in young healthy adults," American Physiological Society. (2014).

Ranadive, S., ACSM - Annual Meeting, "Effect of vitamin C on hyperoxia induced vasoconstriction in exercising skeletal muscle," American College of Sports Medicine. (2014).

Ranadive, S., ACSM - Annual Meeting, "Effect of acute aerobic exercise on vaccine efficacy in older adults," American College of Sports Medicine. (2013).

Ranadive, S., Experimental Biology, "Effect of acute moderate exercise on vaccination induced inflammation and arterial function in older adults," American Physiological Society. (2013).

Ranadive, S., Experimental Biology, "Racial Difference in Central Stiffness and Arterial Structure following Aerobic Exercise Training," American Physiological Society. (2012).

Ranadive, S., ACSM - Annual Meeting, "Racial Differences in Blood Pressure Response and Vascular Function following 8-weeks of Aerobic Training," American College of Sports Medicine. (2012).

Ranadive, S., ACSM - Annual Meeting, "Vascular Dysfunction and Physical Activity in Multiple Sclerosis," American College of Sports Medicine. (2011).

Ranadive, S., ACSM - Annual Meeting, "Total Arterial Compliance and Haemodynamic Responses in Older Adults Following Single Isometric Handgrip Exercise Bout," American College of Sports Medicine. (2010).

Ranadive, S., ACSM - Annual Meeting, "Heart Rate Recovery Following Maximal Arm And Leg Ergometry," American College of Sports Medicine. (2009).

#### Symposia

Ranadive, S., Integrative Physiology of Exercise, "Acute Estrogen Does Not Augment the beta(2) - Adrenergic Receptor Mediated Vasodilation in Postmenopausal Women," American College of Sports Medicine and American Physiological Society. (2018).

Ranadive, S., North American Artery, "Arterial Function Following Exercise & Testing." (2018).

Ranadive, S., MARC - ACSM, "β2 – Adrenergic and Estrogen Mediated Vasodilation in Women," American College of Sports Medicine. (2017).

#### Symposia – Co-Chair

Ranadive, S., Experimental Biology, "No Scientist Left Behind," American Physiological Society. (2019).

#### Sponsored Research and Programs - Administered by the Office of Research Administration (ORA)

##### Grants

Ranadive, S. (Lead Investigator), "American Physiological Society Research Career Enhancement Award," Sponsored by American Physiological Society. (August 1, 2019 - September 30, 2020).

Sapp, R. M. (Lead Investigator), Hagberg, J. (Key Person), Ranadive, S. (Key Person), "Racial differences in vascular function and circulating microRNAs in response to acute exercise," Sponsored by American College of Sports Medicine. (July 1, 2019 - June 30, 2020).

#### Other Sponsored Research

Ranadive, S. (Lead Investigator), "Tier 1 Award", Sponsored by University of Maryland. (July 2018 – June 2019)

### **III. Teaching, Extension, Mentoring, and Advising**

#### Courses Taught

##### Fall 2019

KNES389 2201 (Fall 2019), Topical Investigations. 1 enrolled.

KNES465 0101 (Fall 2019), Physical Activity and Disease Prevention and Treatment. 31 enrolled.

KNES465H 0101 (Fall 2019), Physical Activity and Disease Prevention and Treatment. 1 enrolled.

KNES689 2201 (Fall 2019), Special Problems in Kinesiology. 2 enrolled.

KNES692 0101 (Fall 2019), Cardiovascular Aspects of Exercise Physiology. 13 enrolled.

KNES789 2201 (Fall 2019), Advanced Projects in Kinesiology. 1 enrolled.

KNES799 2201 (Fall 2019), Master's Thesis Research. 1 enrolled.

##### Spring 2019

KNES360 0101 (Spring 2019), Physiology of Exercise. 107 enrolled.

KNES360H 0101 (Spring 2019), Physiology of Exercise. 1 enrolled.

KNES389 2201 (Spring 2019), Topical Investigations. 1 enrolled.

KNES465 0101 (Spring 2019), Physical Activity and Disease Prevention and Treatment. 19 enrolled.

KNES465H 0101 (Spring 2019), Physical Activity and Disease Prevention and Treatment. 1 enrolled.

KNES689 2201 (Spring 2019), Special Problems in Kinesiology. 2 enrolled.

##### Fall 2018

KNES465 0101 (Fall 2018), Physical Activity and Disease Prevention and Treatment. 27 enrolled.

KNES498 2201 (Fall 2018), Special Topics in Kinesiology. 1 enrolled.

KNES689 2201 (Fall 2018), Special Problems in Kinesiology. 2 enrolled.

#### Spring 2018

KNES389 2201 (Spring 2018), Topical Investigations. 1 enrolled.

#### Fall 2017

KNES692 0101 (Fall 2017), Cardiovascular Aspects of Exercise Physiology. 5 enrolled.

#### Advising: Research or Clinical

##### Undergraduate

Research credit mentor; Radhika Gholap (2019 - Present).

Mentor; Sarina Maini (2019 - Present).

Advisor; Rachel Martin (2019 - Present).

Advisor; Kelley Roark (2019 - Present).

Advisor; Brooke Wagar (2019 - Present).

Mentor; Sarika Walia (2019 - Present).

Advisor; Kaitlyn Welsh (2018 - Present).

Advisor; Maes Zitowski (2018 - Present).

Advisor; Jacey Tuura (2017). Mayo Clinic.

Mentor; Bryan Johnson (2016). Mayo Clinic.

##### Master's

Advisor; Sara Mascone (2019 - Present).

Advisor; Catalina Chesney (2018 - Present).

Mentor; John-Roger Shepherd (2014 - 2017). Mayo Clinic.

##### Doctoral

Advisor; Lauren Eagan (2018 - Present).

##### Other Directed Research

Mentor; Gabrielle Dillon (2015 - 2017). Mayo Clinic.

Mentor; Jared Campbell (2015 - 2016). Mayo Clinic.

#### **IV. Service and Outreach**

##### Reviewing Activities for Journals and Presses

Reviewer, Sports Medicine. (2019 - Present).

Reviewer, International Journal of Sports Medicine. (2015 - Present).

Reviewer, Journal of Applied Physiology. (2015 - Present).

Reviewer, Journal of Sports Science and Medicine. (2015 - Present).

Reviewer, Journal of the American Aging Association. (2015 - Present).

Reviewer, Open Access Journal of Sports Medicine. (2015 - Present).

Reviewer, Vascular Health and Risk Management. (2015 - Present).

Reviewer, American Journal of Hypertension. (2014 - Present).

Reviewer, American Journal of Physiology. (January 2014 - Present).

Reviewer, Biomedical Central Cardiovascular Disorders. (2014 - Present).

Reviewer, Europace. (2014 - Present).

Reviewer, Experimental Gerontology. (2014 - Present).

Reviewer, Experimental Physiology. (2014 - Present).

Reviewer, Journal of Human Hypertension. (2014 - Present).

Reviewer, Scandinavian Journal of Rheumatology. (2014 - Present).

Reviewer, Brain Behavior and Immunity. (2013 - Present).

Reviewer, European Journal of Clinical Nutrition. (2013 - Present).

Reviewer, European Journal of Pediatrics. (2013 - Present).

Reviewer, Medicine & Science in Sports & Exercise. (2013 - Present).

Reviewer, American Journal of Physiology - Heart and Circulatory Physiology. (2012 - Present).

Reviewer, American Journal of Physiology - Regulatory, Integrative, and Comparative Physiology. (2012 - Present).

Reviewer, Drug, Design, Development and Therapy. (2012 - Present).

##### Reviewing Activities for Agencies and Foundations

Reviewer, American Heart Association. (2014 - Present).

##### Committees, Professional & Campus Service

##### Campus Service - Department

Member, Search committee (SPHL-Kinesiology). 2020 - Present.

Co-Chair, Research Seminar Committee (SPHL-Kinesiology). 2019 - Present.

Member, Graduate Committee (SPHL-Kinesiology). 2019 - Present.

Member, MPH Committee (SPHL-Kinesiology). 2018 - Present.

External Service and Consulting

Committee Member, Mid-Atlantic American College of Sports Medicine. (2019 - 2021).

Committee Member, American Physiological Society. (2017 - 2020).