

Brian A. Irving
Louisiana State University
William Prescott 'Pres' Foster
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Education

2001-2006	University of Virginia Ph.D., Exercise Physiology	Charlottesville, VA
2001-2004	University of Virginia M.S., Health Evaluation Science Major: Clinical & Patient-Oriented Research	Charlottesville, VA
1998-2000	Oregon State University B.S., Health and Human Performance Major: Exercise and Sports Science Graduated Summa Cum Laude	Corvallis, OR
1996-1998	University of Miami Biochemistry	Coral Gables; FL Major:

Current Academic Rank and Position

2019-Present Associate Professor (Tenured), Louisiana State University, School of Kinesiology

2015-Present Adjunct Faculty, Pennington Biomedical Research Center

Previous Professional Positions and Major Appointments

2015-2019	Assistant Professor, Louisiana State University, School of Kinesiology.
2012-2015	Staff Scientist (Assistant Professor), Geisinger Health System, Weis Center for Research.
2012-2015	Director of Metabolic Phenotyping Lab, Geisinger Health System, Obesity Institute.
2010-2012	Associate Consultant, Division of Endocrinology, Diabetes, Metabolism, and Nutrition.
2009-2012	Assistant Professor, Mayo Clinic - Division of Endocrinology, Diabetes, Metabolism, and Nutrition.
2007-2012	NIH Clinical Research Scholar (KL2), Division of Endocrinology, Diabetes, Metabolism, and Nutrition.
2006-2007	NIH Postdoctoral Fellow, Mayo Clinic - Division of Endocrinology, Diabetes, Metabolism, and Nutrition.
2005-2006	NCAA Certification Chief Report Writer, University of Virginia, Department of Athletics.
2002-2006	Graduate Teaching Assistant, Department of Human Services, Kinesiology, University of Virginia.
2001-2004	NIH Complementary and Alternative Medicine Predoctoral Fellow, University of Virginia.
2001-2004	Research Assistant, Oregon Health Science University, Division of Health Promotion & Sports Medicine.

Awards and Honors

2019	Rising Star, Bench-to-Bedside Conference "Osteoporosis and Soft Tissue Disorders" (NIA and AGS)
2019	William Prescott Foster Professorship
2018	LSU Alumni Association Rising Faculty Award

- 2017 Fellow of the American College of Sports Medicine (FACSM)
- 2013 Power-O2k Laboratory: MiPNet Expert Team in High Resolution Respirometry
- 2012 APS: Endocrinology and Metabolism Section's New Investigator Award, American Physiological Society
- 2008 Charter Member of the Mayo Clinic Center for Translational Sciences Activities, Mayo Clinic
- 2006 Doctoral Student Research Award, Southeast Chapter of the American College of Sports Medicine
- 2004 Michael Pollock Memorial Grant Finalist (ACSM), American College of Sports Medicine
- 2003 Graduate Fellowship in Education, University of Virginia
- 2002 Dupont Fellowship-Education, University of Virginia
- 2001 Curry School of Education Foundation Award, University of Virginia

Professional Memberships

- 2016-Present MitoEAGLE Consortium
- 2013-Present Mitochondrial Physiology Society
- 2010-Present American Physiological Society
- 2006-2014 American Diabetes Association
- 2004-Present Endocrine Society
- 2003-Present Obesity Society
- 2002-Present American College of Sports Medicine

Publications (Reverse Order, *Authors Contributed Equally, #Corresponding Author)

- 70. Rees BB, Reemeyer J, **Irving BA**. Interindividual variation in maximum aerobic metabolism varies with gill morphology and myocardial bioenergetics in Gulf killifish. *J Exp Biol.* 2022 Jun 15;225(12):jeb243680. doi: 10.1242/jeb.243680. Epub 2022 Jun 22.
- 69. Granger J, Cho E, Lindsey K, Lemoine N, Calvert D, Marucci J, Mullenix S, O'Neal H, **Irving BA**, Johannsen N, Spielmann. Salivary immunity of elite collegiate American football players infected with SARS-CoV-2 normalizes following isolation. *Sci Rep.* 2022 May 31;12(1):9090. doi: 10.1038/s41598-022-12934-7. PMCID: PMC9154042.
- 68. Henderson, GC, Hashimoto T, **Irving BA**, Halliday TM. **Editorial:** Mechanisms Linking Transport and Utilization of Metabolic Fuels to the Impact of Nutrition and Exercise Upon Health. *Front Nutr.* 2021 Nov 26;8:803369. doi: 10.3389/fnut.2021.803369. eCollection 2021.
- 67. Theall B, Stampley J, Cho E, Granger J, Johannsen NM, **Irving BA**, Spielmann G. Impact of acute exercise on peripheral blood mononuclear cells nutrient sensing and mitochondrial oxidative capacity in healthy young adults. *Physiol Rep.* 2021 Dec;9(23):e15147. doi: 10.14814/phy2.15147.
- 66. Zunica ERM, Axelrod CL, Cho E, Spielmann G, Davuluri G, Alexopoulos SJ, Beretta M, Hoehn KL, Dantas WS, Stadler K, King WT, Pergola K, **Irving BA**, Langohr IM, Yang S, Hoppel CL, Gilmore LA, Kirwan JP. Breast cancer growth and proliferation is suppressed by the mitochondrial targeted furazano[3,4-b]pyrazine BAM15. *Cancer Metab.* 2021 Oct 9;9(1):36. doi: 10.1186/s40170-021-00274-5.
- 65. Vincellette CM, Losso JN, Early K, Spielmann G, **Irving BA**, Allerton TD. Supplemental Watermelon Juice Attenuates Acute Hyperglycemia-Induced Macro-and Microvascular Dysfunction in Healthy Adults. *J Nutr.* 2021 Nov 2;151(11):3450-3458.

64. Cho E, Theall B, Stampley J, Granger J, Johannsen N, **Irving BA**, Spielmann G. Cytomegalovirus Infection Impairs the Mobilization of Tissue-Resident Innate Lymphoid Cells into the Peripheral Blood Compartment in Response to Acute Exercise. *Viruses*. 2021;13(8).
63. Hanna R, Gosalia J, Demalis A, Hobson Z, McCully KK, **Irving BA**, Mookerjee S, Vairo GL, Proctor DN. Bilateral NIRS measurements of muscle mitochondrial capacity: Feasibility and repeatability. *Physiol Rep*. 2021;9(8):e14826.
62. Davis B, Liu Y, Stampley J, Wood GC, Mitchell DC, Jensen GL, Gao X, Glynn NW, Still CD, **Irving BA**[#]. The Association between Poor Diet Quality, Physical Fatigability and Physical Function in the Oldest-Old from the Geisinger Rural Aging Study. *Geriatrics (Basel, Switzerland)*. 2021;6(2).
61. Wang H, Martone M, Owens ME, Lemoine NP Jr, Marucci J, Calvert D, Mullenix S, Church TS, Rood J, Harrell B, **Irving BA**, Spielmann G, Johannsen NM. NCAA Division I American Football Players with Sick Cell Trait have altered Hematological Responses and Hydration Status. *Scientific Reports*. 2021;11(1):1844.
60. Allerton TD, Kowalski GM, Stampley J, **Irving BA**, Lighton JRB, Floyd ZE, Stephens JM. An Ethanolic Extract of *Artemisia dracuncululus* L. Enhances the Metabolic Benefits of Exercise in Diet-induced Obese Mice. *Med Sci Sports Exerc*. 2021;53(4):712-723.
59. Theall B, Wang H, Kuremsky CA, Cho E, Hardin K, Robelot L, Marucci J, Mullenix S, Lemoine N, Jr., Johannsen NM, **Irving BA**, Spielmann G. Allostatic stress load and CMV serostatus impact immune response to maximal exercise in collegiate swimmers. *J Appl Physiol (1985)*. 2020;128(1):178-88.
58. Chen YF, Stampley J, **Irving BA**, Dugas TR. Chronic nucleoside reverse transcriptase inhibitors disrupt mitochondrial homeostasis and promote premature endothelial senescence. *Toxicol Sci*. 2019;172(2):445-456.
57. Allerton TD, **Irving BA**, Spielmann G, Primeaux S, Landin D, Nelson A, Johannsen NM. Metabolic flexibility is impaired in response to acute exercise in the young offspring of mothers with type 2 diabetes. *Physiol Rep*. 2019 Sep;7(17):e14189.
56. Sullivan PA, Still CD, Jamieson ST, Dixon CB, **Irving BA**, Andreacci JL. Evaluation of multi-frequency bioelectrical impedance analysis for the assessment of body composition in individuals with obesity. *Obes Sci Pract*. 2018 Dec 26;5(2):141-147.
55. Broskey NT, Marlatt KL, Most J, Erickson ML, **Irving BA**, Redman LM. The Panacea of Human Aging: Calorie Restriction Versus Exercise. *Exerc Sport Sci Rev*. 2019 Apr 15.
54. Ross R, Goodpaster BH, Koch LG, Sarzynski MA, Kohrt WM, Johannsen NM, Skinner JS, Castro A, **Irving BA**, Noland RC, Sparks LM, Spielmann G, Day AG, Pitsch W, Hopkins WG, Bouchard C. Precision exercise medicine: understanding exercise response variability. *Br J Sports Med*. 2019 Sep;53(18):1141-1153.
53. Langer HT, Mossakowski AA, Baar K, Alcazar J, Martin-Rincon M, Alegre LM, Ara I, Calbet JAL, Hinkley JM, Coen PM, **Irving BA**, Allerton TD, Nair S, Lima RM, Rey-López JP, Scott D, Daly RM, Ebeling PR, Hayes A, Tessier AJ, Chevalier S, Yates BA, Brown LR, Storer TW, Westcott WL, Nifli AP, Musci RV, Konopka AR, Hamilton KL, Hepple RT. **Commentaries on Viewpoint:** Rejuvenation of the term sarcopenia. *J Appl Physiol (1985)*. 2019 Jan 1;126(1):257-262.
52. Chacon PJ, Pu L, da Costa TH, Shin Y-H, Ghomian T, Shamkhalichenar H, Wu H-C, **Irving BA**, Choi J-W. A Wearable Pulse Oximeter with Wireless Communication and Motion Artifact Tailoring for Continuous Use. *IEEE Trans Biomed Eng*. 2019 Jun;66(6):1505-1513.
51. Allerton T, Proctor DN, Stephens JM, Spielmann G, **Irving BA**[#]. L-Citrulline Supplementation: Impact on Cardiometabolic Health. *Nutrients*. 2018;10(7):921.

50. Benotti PN, Still CD, Craig Wood G, Seiler JL, Seiler CJ, Thomas SP, Petrick AT, Suk M, **Irving BA**. Surgical weight-loss to improve functional status trajectories following total knee arthroplasty: SWIFT trial: Rationale, design, and methods. *Contemp Clin Trials*. 2018 Jun;69:1-9.
49. Deemer SE, Castleberry TJ, Irvine C, Newmire DE, Oldham M, King GA, Ben-Ezra V, **Irving BA**, Biggerstaff KD. Pilot study: an acute bout of high intensity interval exercise increases 12.5 h GH secretion. *Physiol Rep*. 2018 Jan;6(2).
48. Miele M, **Irving BA**[#], Wenrich B, Martin P, Rovnyak D. Reproducibility and Stability of Aqueous Metabolite Levels in Extracted Serum by NMR Spectroscopy. *Current Metabolomics*. 2017;05(1):45–54.
47. Lent MR, Bailey-Davis L, **Irving BA**, Wood GC, Cook AM, Hirsch AG, Still CD, Benotti PN, Franceschelli-Hosterman J. Bariatric Surgery Patients and Their Families: Health, Physical Activity, and Social Support. *Obesity Surgery*. 2016;26(12):2981–2988.
46. **Irving BA**[#], Spielmann G. Does Citrulline Sit at the Nexus of Metformin's Pleotropic Effects on Metabolism and Mediate Its Salutatory Effects in Individuals With Type 2 Diabetes? *Diabetes*. 2016;65(12):3537–3540.
45. Fleming J, Wood GC, Seiler C, Cook A, Lent MR, Still CD, Benotti PN, **Irving BA**[#]. Electronically captured, patient-reported physical function: an important vital sign in obesity medicine. *Obesity Science & Practice*. 2016;2(4):399–406.
44. **Irving BA**[#], Wood GC, Bennotti PN, Babu E, Deshpande A, Lent MR, Petrick A, Gabrielsen J, Strodel W, Gerhard GS, et al. Nutrient Transporter Expression in the Jejunum in Relation to Body Mass Index in Patients Undergoing Bariatric Surgery. *Nutrients*. 2016;8(11).
43. Johnson ML, Distelmaier K, Lanza IR, Irving BA, Robinson MM, Konopka AR, Shulman GI, Nair KS. Mechanism by Which Caloric Restriction Improves Insulin Sensitivity in Sedentary Obese Adults. *Diabetes*. 2016;65(1):74–84.
42. **Irving BA**[#], Lanza IR, Henderson GC, Rao RR, Spiegelman BM, Nair KS. Combined training enhances skeletal muscle mitochondrial oxidative capacity independent of age. *J Clin Endocrinol Metab*. 2015;100(4):1654–63.
41. Konopka AR, Asante A, Lanza IR, Robinson MM, Johnson ML, Dalla Man C, Cobelli C, Amols MH, **Irving BA**, Nair KS. Defects in mitochondrial efficiency and H₂O₂ emissions in obese women are restored to a lean phenotype with aerobic exercise training. *Diabetes*. 2015;64(6):2104–15.
40. Johnson ML, **Irving BA**, Lanza IR, Vendelbo MH, Konopka AR, Robinson MM, Henderson GC, Klaus KA, Morse DM, Heppelmann C, et al. Differential Effect of Endurance Training on Mitochondrial Protein Damage, Degradation, and Acetylation in the Context of Aging. *J Gerontol A Biol Sci Med Sci*. 2015;70(11):1386–93.
39. **Irving BA**[#], Carter RE, Soop M, Weymiller A, Syed H, Karakelides H, Bhagra S, Short KR, Tatpati L, Barazzoni R, et al. Effect of insulin sensitizer therapy on amino acids and their metabolites. *Metabolism*. 2015;64(6):720–8.
38. Hayes S, Napolitano MA, Lent MR, Wood GC, Gerhard GS, **Irving BA**, Argyropoulos G, Foster GD, Still CD. The effect of insurance status on pre- and post-operative bariatric surgery outcomes. *Obes Surg*. 2015;25(1):191–4.
37. Hines KM, Ford GC, Klaus KA, **Irving BA**, Ford BL, Johnson KL, Lanza IR, Nair KS. Application of high-resolution mass spectrometry to measure low abundance isotope enrichment in individual muscle proteins. *Analytical and bioanalytical chemistry*. 2015;407(14):4045–52.
36. **Irving BA**[#], Still CD, Argyropoulos G. Does IRISIN have a bright future as a therapeutic agent in humans? *Current Obesity Reports*. 2014:1–7.

35. Huseini M, Wood GC, Seiler J, Argyropoulos G, **Irving BA**, Gerhard GS, Benotti P, Still C, Rolston DD. Gastrointestinal symptoms in morbid obesity. *Front Med (Lausanne)*. 2014;1:49.
34. Still CD, Wood GC, Benotti P, Petrick AT, Gabrielsen J, Strodel WE, Ibele A, Seiler J, **Irving BA**, Celaya MP, et al. Preoperative prediction of type 2 diabetes remission after Roux-en-Y gastric bypass surgery: a retrospective cohort study. *Lancet Diabetes Endocrinol*. 2014 Jan;2(1):38-45.
33. Almandoz JP, Singh E, Howell LA, Grothe K, Vlazny DT, Smailovic A, **Irving BA**, Nelson RH, Miles JM. Spillover of Fatty acids during dietary fat storage in type 2 diabetes: relationship to body fat depots and effects of weight loss. *Diabetes*. 2013;62(6):1897–903.
32. Ruas JL, White JP, Rao RR, Kleiner S, Brannan KT, Harrison BC, Greene NP, Wu J, Estall JL, **Irving BA**, et al. A PGC-1alpha isoform induced by resistance training regulates skeletal muscle hypertrophy. *Cell*. 2012;151(6):1319–31.
31. **Irving BA**[#], Robinson MM, Nair KS. Age effect on myocellular remodeling: response to exercise and nutrition in humans. *Ageing Res Rev*. 2012;11(3):374–89.
30. McCoy RG, **Irving BA**, Soop M, Srinivasan M, Tatpati L, Chow L, Weymiller AJ, Carter RE, Nair KS. Effect of insulin sensitizer therapy on atherothrombotic and inflammatory profiles associated with insulin resistance. *Mayo Clin Proc*. 2012;87(6):561–70.
29. Short KR*, **Irving BA***, Basu A, Johnson CM, Nair KS, Basu R. Effects of type 2 diabetes and insulin on whole-body, splanchnic, and leg protein metabolism. *J Clin Endocrinol Metab*. 2012;97(12):4733–41.
28. Di Camillo B, **Irving BA**, Schimke J, Sanavia T, Toffolo G, Cobelli C, Nair KS. Function-based discovery of significant transcriptional temporal patterns in insulin stimulated muscle cells. *PLoS One*. 2012;7(3):e32391.
27. Nair KS, **Irving BA**, Lanza IR. Can dietary nitrates enhance the efficiency of mitochondria? *Cell Metab*. 2011;13(2):117–8.
26. Brock DW, **Irving BA**, Gower B, Hunter GR. Differences emerge in visceral adipose tissue accumulation after selection for innate cardiovascular fitness. *Int J Obes (Lond)*. 2011;35(2):309–12.
25. **Irving BA**[#], Nair KS, Srinivasan M. Effects of insulin sensitivity, body composition, and fitness on lipoprotein particle sizes and concentrations determined by nuclear magnetic resonance. *J Clin Endocrinol Metab*. 2011;96(4):E713–8.
24. **Irving BA**[#], Short KR, Nair KS, Stump CS. Nine days of intensive exercise training improves mitochondrial function but not insulin action in adult offspring of mothers with type 2 diabetes. *J Clin Endocrinol Metab*. 2011;96(7):E1137–41.
23. Rostambeigi N, Lanza IR, Dzeja PP, Deeds MC, **Irving BA**, Reddi HV, Madde P, Zhang S, Asmann YW, Anderson JM, et al. Unique cellular and mitochondrial defects mediate FK506-induced islet beta-cell dysfunction. *Transplantation*. 2011;91(6):615–23.
22. Karakelides H, **Irving BA**, Short KR, O'Brien P, Nair KS. Age, obesity, and sex effects on insulin sensitivity and skeletal muscle mitochondrial function. *Diabetes*. 2010;59(1):89–97.
21. Srinivasan M*, **Irving BA***, Frye RL, O'Brien P, Hartman SJ, McConnell JP, Nair KS. Effects on lipoprotein particles of long-term dehydroepiandrosterone in elderly men and women and testosterone in elderly men. *J Clin Endocrinol Metab*. 2010;95(4):1617–25.
20. Muniyappa R, **Irving BA**, Unni US, Briggs WM, Nair KS, Quon MJ, Kurpad AV. Limited predictive ability of surrogate indices of insulin sensitivity/resistance in Asian-Indian men. *Am J Physiol Endocrinol Metab*. 2010;299(6):E1106–12.

19. Tatpati LL*, **Irving BA***, Tom A, Bigelow ML, Klaus K, Short KR, Nair KS. The effect of branched chain amino acids on skeletal muscle mitochondrial function in young and elderly adults. *J Clin Endocrinol Metab.* 2010;95(2):894–902.
18. Sawyer BJ, Blessinger JR, **Irving BA**, Weltman A, Patrie JT, Gaesser GA. Walking and running economy: inverse association with peak oxygen uptake. *Med Sci Sports Exerc.* 2010;42(11):2122–7.
17. Jaleel A, Klaus KA, Morse DM, Karakelides H, Ward LE, **Irving BA**, Nair KS. Differential effects of insulin deprivation and systemic insulin treatment on plasma protein synthesis in type 1 diabetic people. *Am J Physiol Endocrinol Metab.* 2009;297(4):E889–97.
16. Srinivasan M, **Irving BA**, Dhataria K, Klaus KA, Hartman SJ, McConnell JP, Nair KS. Effect of dehydroepiandrosterone replacement on lipoprotein profile in hypoadrenal women. *J Clin Endocrinol Metab.* 2009;94(3):761–4.
15. Allemand MC, **Irving BA**, Asmann YW, Klaus KA, Tatpati L, Coddington CC, Nair KS. Effect of testosterone on insulin stimulated IRS1 Ser phosphorylation in primary rat myotubes—a potential model for PCOS-related insulin resistance. *PLoS One.* 2009;4(1):e4274.
14. **Irving BA**, Weltman JY, Patrie JT, Davis CK, Brock DW, Swift D, Barrett EJ, Gaesser GA, Weltman A. Effects of exercise training intensity on nocturnal growth hormone secretion in obese adults with the metabolic syndrome. *J Clin Endocrinol Metab.* 2009;94(6):1979–86.
13. Henderson GC, **Irving BA**, Nair KS. Potential application of essential amino acid supplementation to treat sarcopenia in elderly people. *J Clin Endocrinol Metab.* 2009;94(5):1524–6.
12. Blessinger J, Sawyer B, Davis C, **Irving BA**, Weltman A, Gaesser G. Reliability of the VmaxST portable metabolic measurement system. *Int J Sports Med.* 2009;30(1):22–6.
11. Nair KS, Bigelow ML, Asmann YW, Chow LS, Coenen-Schimke JM, Klaus KA, Guo ZK, Sreekumar R, **Irving BA**. Asian Indians have enhanced skeletal muscle mitochondrial capacity to produce ATP in association with severe insulin resistance. *Diabetes.* 2008;57(5):1166–75.
10. Irving BA, Davis CK, Brock DW, Weltman JY, Swift D, Barrett EJ, Gaesser GA, Weltman A. Effect of exercise training intensity on abdominal visceral fat and body composition. *Med Sci Sports Exerc.* 2008;40(11):1863–72.
9. Igwebuike A*, Irving BA*, Bigelow ML, Short KR, McConnell JP, Nair KS. Lack of dehydroepiandrosterone effect on a combined endurance and resistance exercise program in postmenopausal women. *J Clin Endocrinol Metab.* 2008;93(2):534–8.
8. **Irving BA**, Nair KS. Aging and diabetes: mitochondrial dysfunction. *Curr Diab Rep.* 2007;7(4):249–51.
7. Swift DL, **Irving BA**, Brock DW, Davis CK, Barrett EJ, Gaesser GA, Weltman A. Heart rate recovery does not predict endothelial function in obese women. *Obesity and Metabolism-Milan.* 2007;3(3):101–105.
6. **Irving BA**, Weltman JY, Brock DW, Davis CK, Gaesser GA, Weltman A. NIH ImageJ and Slice-O-Matic computed tomography imaging software to quantify soft tissue. *Obesity (Silver Spring).* 2007;15(2):370–6.
5. **Irving BA**, Davis CK, Brock DW, Weltman JY, Swift D, Barrett EJ, Gaesser GA, Weltman A. The metabolic syndrome, hypertriglyceridemic waist, and cardiometabolic risk factor profile in obese women. *Obe Metab.* 2007;3(2):50–57.
4. Brock DW, Davis CK, **Irving BA**, Rodriguez J, Barrett EJ, Weltman A, Taylor AG, Gaesser GA. A high-carbohydrate, high-fiber meal improves endothelial function in adults with the metabolic syndrome. *Diabetes Care.* 2006;29(10):2313–5.

3. **Irving BA**, Rutkowski J, Brock DW, Davis CK, Barrett EJ, Gaesser GA, Weltman A. Comparison of Borg- and OMNI-RPE as markers of the blood lactate response to exercise. *Med Sci Sports Exerc.* 2006;38(7):1348–52.
2. **Irving BA**, Davis CK, Swift D, Brock DW, Gaesser GA, Weltman A. Training Intensity on Abdominal Visceral Fat and the Cardiometabolic Risk Profile in Abdominally Obese Individuals with the Metabolic Syndrome. *Physical Activity and Obesity* (A.P. Hills, N.A. King, N.M. Byrne eds). 2006:81–90.
1. **Irving BA**, Patrie JT, Anderson SM, Watson-Winfield DD, Frick KI, Evans WS, Veldhuis JD, Weltman A. The effects of time following acute growth hormone administration on metabolic and power output measures during acute exercise. *J Clin Endocrinol Metab.* 2004;89(9):4298–305.

Publications in Review

Other Publications

3. Corresponding author:, Gnaiger E, Co-authors:, Aasander Frostner E, Abumrad NA, Acuna-Castroviejo D, Ahn B, Ali SS, Alves MG, Amati F, Aral C, Arandarcikaite O, Bailey DM, Bajpeyi S, Bakker BM, Bastos Sant'Anna Silva AC, Battino M, Bazil J, Beard DA, Bednarczyk P, Ben-Shachar D, Bergdahl A, Bernardi P, Bishop D, Blier PU, Boetker HE, Boros M, Borsheim E, Borutaite V, Bouillaud F, Bouitbir J, Breton S, Brown DA, Brown GC, Brown RA, Brozinick JT, Buettner GR, Burtscher J, Calabria E, Calbet JA, Calzia E, Cannon DT, Canto AC, Cardoso LHD, Carvalho E, Casado Pinna M, Cassina AM, Castro L, Cavalcanti-de-Albuquerque JP, Cervinkova Z, Chaurasia B, Chen Q, Chicco AJ, Chinopoulos C, Chowdhury SK, Clementi E, Coen PM, Coker RH, Collin A, Crisostomo L, Darveau CA, Das AM, Dash RK, Davis MS, De Palma C, Dembinska-Kiec A, Dias TR, Distefano G, Doerrier C, Drahota Z, Dubouchaud H, Ducher MR, Dumas JF, Durham WJ, Dymkowska D, Dyrstad SE, Dzialowski EM, Ehinger J, Elmer E, Endlicher R, Engin AB, Fell DA, Ferko M, Ferreira JCB, Ferreira R, Fessel JP, Filipovska A, Fisar Z, Fischer M, Fisher G, Fisher JJ, Fornaro M, Galkin A, Gan Z, Garcia-Roves PM, Garcia-Souza LF, Garlid KD, Garrabou G, Garten A, Gastaldelli A, Genova ML, Giovarelli M, Gonzalez-Armenta JL, Gonzalo H, Goodpaster BH, Gorr TA, Gourlay CW, Granata C, Grefte S, Gueguen N, Haas CB, Haavik J, Haendeler J, Hamann A, Han J, Hancock CR, Hand SC, Hargreaves IP, Harrison DK, Heales SJR, Hellgren KT, Hepple RT, Hernansanz-Agustin P, Hickey AJ, Hoel F, Holland OJ, Holloway GP, Hoppel CL, Houstek J, Hunger M, Iglesias-Gonzalez J, **Irving BA**, Iyer S, Jackson CB, Jadiya P, Jang DH, Jang YC, Jansen-Duerr P, Jespersen NR, Jha RK, Jurk D, Kaambre T, Kaczor JJ, Kainulainen H, Kandel SM, Kane DA, Kappler L, Karabatsiakakis A, Karkucinska-Wieckowska A, Keijer J, Keppner G, Khamoui AV, Klingenspor M, Komlodi T, Koopman WJH, Kopitar-Jerala N, Kowaltowski AJ, Krajcova A, Krako Jakovljevic N, Kristal BS, Kuang J, Kucera O, Kwak HB, Kwast K, Labieniec-Watala M, Lai N, Land JM, Lane N, Laner V, Lanza IR, Larsen TS, Lavery GG, Lee HK, Leeuwenburgh C, Lemieux H, Lerfall J, Li PA, Liu J, Lucchinetti E, Macedo MP, MacMillan-Crow LA, Makrecka-Kuka M, Malik AN, Markova M, Martin DS, Mazat JP, McKenna HT, Menze MA, Meszaros AT, Methner A, Michalak S, Moellering DR, Moiso N, Molina AJA, Montaigne D, Moore AL, Moreau K, Moreira BP, Moreno-Sanchez R, Mracek T, Muntane J, Muntean DM, Murray AJ, Nair KS, Nemec M, Neuffer PD, Neuzil J, Newsom S, Nozickova K, O'Gorman D, Oliveira MF, Oliveira MT, Oliveira PF, Oliveira PJ, Orynbayeva Z, Osiewacz HD, Pak YK, Pallotta ML, Palmeira CM, Parajuli N, Passos JF, Patel HH, Pecina P, Pelnena D, Pereira da Silva Grilo da Silva F, Pesta D, Petit PX, Pettersen IKN, Pichaud N, Piel S, Pietka TA, Pino MF, Pirkmajer S, Porter C, Porter RK, Pranger F, Prochownik EV, Pulinilkunnil T, Puskarich MA, Puurand M, Quijano C, Radenkovic F, Radi R, Ramzan R, Rattan S, Reboredo P, Renner-Sattler K, Robinson MM, Roden M, Roesland GV, Rodríguez-Enriquez RJ, Rohlena J, Rolo AP, Ropelle ER, Rossiter HB, Rybacka-Mossakowska J, Saada A, Safaei Z, Salin K, Salvadego D, Sandi C, Sanz A, Sazanov LA, Scatena R, Schartner M, Scheibye-Knudsen M, Schilling JM, Schlattner U, Schoenfeld P, Schwarzer C, Scott GR, Shabalina IG, Sharma P, Sharma V, Shevchuk I, Siewiera K, Silber AM, Silva AM, Sims CA, Singer D, Skolik R, Smenes BT, Smith J, Soares FAA, Sobotka O, Sokolova I, Sonkar VK, Sparagna GC, Sparks LM, Spinazzi M, Stankova P, Stary C, Stiban J, Stier A, Stocker R, Sumbalova Z, Suravajhala P, Swerdlow RH, Swiniuch D, Szabo I, Szewczyk A, Tanaka M, Tandler B, Tarnopolsky MA, Tavernarakis N, Tepp K, Thyfault JP, Tomar D, Towheed A, Tretter L, Trifunovic A, Trivigno C, Tronstad KJ, Trougakos IP, Tyrrell DJ, Urban T, Valentine JM, Velika B, Vendelin M, Vercesi AE, Victor VM, Vieyra A, Villena JA, Vitorino RMP, Vogt S, Volani C, Votion DM, Vujacic-Mirski K, Wagner BA, Ward ML, Warnsmann V,

Wasserman DH, Watala C, Wei YH, Wieckowski MR, Williams C, Wohlgemuth SE, Wohlwend M, Wolff J, Wuest RCI, Yokota T, Zablocki K, Zaugg K, Zaugg M, Zhang Y, Zhang YZ, Zischka H, Zorzano A (2018) MitoEAGLE preprint 2018-06-10(39) Mitochondrial respiratory states and rates: Building blocks of mitochondrial physiology.

2. **Irving, BA.** Dissertation: Impact of Exercise Intensity on Abdominal Visceral Fat (AVF) and Risk Factors Associated with the Metabolic Syndrome. Advisors: Arthur Weltman, Glenn Gaesser, Eugene Barrett, Ann Gill Taylor. University of Virginia. March 2006.
1. Parker, EB, Clark, BR, Richardson, NT, Olowin, AB, Gaesser, GA, **Irving, BA.** A Low-Cost, High-Performance Physical Activity Monitor (PAM). Final Report. Department of Education, March 31, 2004. (Contract No. ED-01-CO-0123).

Presentations (Reverse Order)

International

20. Chicco A (Author & Presenter), Zilhaver PT (Author), Whitcomb LA (Author), Fresa KJ (Author), Izon CS (Author), Gonzalez-Franquesa A (Author), Izon CS, Dometita C (Author), **Irving BA** (Author), Garcia-Roves PM (Author). Elucidating the complexity of substrate-uncoupler-inhibitor titration protocols. Bioblast 2022: BEC Inaugural Conference. Innsbruck, AT. (Jun 29 – 30, 2022).
19. **Irving BA** (Author & Presenter), Stampley J (Author), Quiariarte H (Author), Wigger Z (Author), Stephens J (Author), Soto P (Author), Allerton TA (Author). Impact of nitric oxide promoters on mitochondrial bioenergetics in a murine model of Alzheimer's disease. Bioblast 2022: BEC Inaugural Conference. Innsbruck, AT. (Jun 29 – 30, 2022)
18. Rees B (Author & Presenter), Reemyer J (Author), **Irving BA** (Author). "Inter-Individual Variation in Aerobic Metabolism Varies with Gill Morphology and Heart Mitochondrial Metabolism," The 14th International Congress on the Biology of Fish. Montpellier, France. (June 28th-July 1st, 2022)
17. Irving BA (Author & Presenter). "Impact of Acute Exercise on PBMC Respiratory Function and Methodological Considerations," Hradec Kralove, Czech Republic. (November 14, 2017). **(Symposium)**
16. Garcia-Roves PM (Author & Presenter), Chabi B (Author), Cortade F (Author), Doerrier C (Author), Dubouchaud H (Author), Gama-Perez P (Author), Greffe S, **Irving BA** (Author), Moreno S (Author), Ost M (Author), Pesta D (Author). 2th Conference on Mitochondrial Physiology -The role of mitochondria in lifestyle and metabolic syndrome - COST MitoEAGLE perspectives, "Mitochondrial Respirometry Reference Values from Permeabilized Mouse Soleus Muscle Fibers," Hradec Kralove, Czech Republic. (November 14, 2017).
15. **Irving BA.** MitoEAGLE Working Group Workshop (WG1-4), "PBMC and T-Cell Mitochondrial Function in Humans: LSU Update," Obergurgl, Austria. (July 27, 2017).
14. **Irving BA.** MitoFit Science Camp 2016, "The Shredder: Lessons Learned," MitoEAGLE Consortium, Kuehtai, Austria. (July 11, 2016).
13. **Irving BA.** MitoFit Science Camp 2016, "PBMC and T-cell Mitochondrial Function in Humans," MitoEAGLE Consortium, Kuehtai, Austria. (July 9, 2016).
12. Irving BA (Author & Presenter). MitoFit Science Camp 2016, "The Rotenone Paradox in Liver Mitochondria," MitoEAGLE Consortium, Kuehtai, Austria. (July 9, 2016).
11. **Irving BA** (Author & Presenter), Mayo-Karolinska Diabetes and Metabolism Meeting, "Dose Exercise Training Modality Differential Affect Skeletal Muscle Adaptation in Young and Older Adults?" Stockholm, Sweden. (December 1, 2013). **(Symposium)**

10. **Irving BA** (Author & Presenter), Stahl R (Author), Kane C (Author), Chernousov M (Author), Argyropoulos G (Author), Carey D. 9th Conference of Mitochondrial Physiology (MIP2013): Comparative Mitochondrial Physiology, "Sex Differences in Murine Mitochondrial Oxidative Capacity following 24 week High-Fat Diet," Oburgurgl, Austria. (September 23, 2013).
9. **Irving BA** (Author & Presenter). Oroboros O2K Fluorometry Workshop, "Shredder Applications in High-Resolution Respirometry," Oburgurgl, Austria. (September 19, 2013).
8. **Irving BA** (Author & Presenter), Roesch S (Author), Kane C (Author), Styer A. (Author), Argyropoulos G. (Author), IOC72 O2k Workshop, "AgRP Deficient Female Mice have Increased Body Weight and Hypothalamic Mitochondrial Oxidative Capacity," Schroecken. (December 5, 2012).
7. **Irving BA**. "Mitochondrial Dysfunction in Aging and its Impact on Fuel Selection," Bjorntorp Symposium, Maastricht, Netherlands. (November 7, 2012). (**Symposium**)
6. **Irving BA** (Author & Presenter), Lanza IR (Author), Dalla Man C (Author), Henderson GC (Author), Nelson R (Author), Miles J (Author), Cobelli C (Author), Nair KS. (Author), European Association for the Study of Diabetes Annual Meeting, "Effect of Age, Sex, Mitochondrial Function, and Exercise Training on Insulin Sensitivity, Beta-Cell Responsivity, and Fatty Acids in Response to a Mixed-Meal," Lisbon, Portugal. (September 12, 2011).
5. **Irving BA** (Author & Presenter). International Symposium on Exercise, "Skeletal Muscle Remodeling in Aging: Impact of Exercise Modality," Rochester, MN. (October 14, 2010). (**Symposium**)
4. **Irving BA** (Author & Presenter), 13th Annual Mayo-Karolinska Diabetes and Metabolism Meeting, "Effect of Insulin Deprivation on Mitochondrial Function," Nice. (October 19, 2007). (**Symposium**)
3. Weltman J (Author & Presenter), **Irving BA**, Brock D (Author), Davis C (Author), Barrett E (Author), Gaesser G (Author), Weltman A (Author). 10th International Congress of Obesity, "Comparison of the NIH ImageJ and Slice-O-Matic Medical Imaging Software to Differentiate and Quantify Adipose and Skeletal Muscle Tissue from Computed Tomography (CT) Scans," Sydney, Australia. (September 4, 2006).
2. **Irving BA** (Author), Brock D (Author), Davis C (Author), Swift D (Author), Patrie J (Author), Barrett E (Author), Gaesser G (Author), Weltman A (Author & Presenter). 10th International Congress of Obesity, "Effects of Exercise Training Intensity on Markers of Inflammation in Abdominally Obese Individuals with the Metabolic," Sydney, Australia. (September 4, 2006).
1. Brock DW (Author & Presenter), Davis CK (Author), **Irving, BA**. (Author), Barrett EJ. (Author), Weltman A. (Author), Gaesser, GA (Author). North American Association for the Study of Obesity Annual Meeting, "Differential Impact of High-Carbohydrate vs. Low-Carbohydrate Meals on Endothelial Function in Subjects with the Metabolic Syndrome," Vancouver, Canada. (October 15, 2005).

National

79. Martone M (Author & Presenter), **Irving B, FACSM** (Author), Spielmann G (Author), Allaway H (Author). Effects Of Hindlimb Unloading And Long Acting Reversible Contraception On Markers Of Mitophagy In Muscle. American College of Sports Medicine: 2022 Annual Meeting and World Congress. (May 31-Jun 4, 2022).
78. Cho E (Author & Presenter), Axelrod C (Author), Kirwan J (Author), Granger J (Author), **Irving B, FACSM** (Author), Johannsen N (Author), Spielmann G (Author). Dysfunctional Metabolisms Of T Cells In Collegiate Football Players Infected With Sars-cov2. American College of Sports Medicine: 2022 Annual Meeting and World Congress. (May 31-Jun 4, 2022).
77. Quiariarte H (Author & Presenter), Lindsey K (Author), Allerton T (Author), Davis B (Author), Stampely JE (Author), Granger JA (Author), Spielmann G (Author), Johannsen NM (Author), Greenway F (Author), **Irving BA, FACSM** (Author). Validation Of Methods To Assess The Influence Of Exercise On

Circulating Exosomes In Older Adults. American College of Sports Medicine: 2022 Annual Meeting and World Congress. (May 31-Jun 4, 2022).

76. Granger J (Author & Presenter), Cho E (Author), Lindsey K (Author), Calvert D (Author), Lemoine N (Author), Marucci J (Author), **Irving BA, FACSM** (Author), Johannsen NM (Author), Spielmann G (Author). Salivary Immunity Of Elite Collegiate Football Players Infected With Sars-cov-2 Normalizes Following Quarantine. American College of Sports Medicine: 2022 Annual Meeting and World Congress. (May 31-Jun 4, 2022).
75. Lowe AC (Author & Presenter), Johannsen NM (Author), **Irving BA, FACSM** (Author), Beyl RA (Author), Newton RL Jr. (Author), Carmichael (Author). Activity Energy Expenditure, Sedentary Time, And Cardiometabolic Responses To An Exercise Intervention: The PAACE Study. American College of Sports Medicine: 2022 Annual Meeting and World Congress. (May 31-Jun 4, 2022).
74. Stampley JE (Author & Presenter), Davis B (Author), Scott MC (Author), Quiariarte H (Author), Cho E (Author), Granger JA (Author), Johannsen NM (Author), Spielmann G (Author), Greenway F (Author), Heymsfield S (Author). **Irving BA, FACSM** (Author). Does Resistance Training Plus Low-intensity Physical Activity Affect Body Composition Or Strength In Older Adults? American College of Sports Medicine: 2022 Annual Meeting and World Congress. (May 31-Jun 4, 2022).
73. Scott MC (Author & Presenter), Stampley JE (Author), Davis B, Quiariarte H (Author), Cho E (Author), Theall BM (Author), Granger JA (Author), Spielmann G (Author), Johannsen NM (Author), Greenway F (Author), **Irving BA, FACSM** (Author). Bone Density And Quality After 4-months Of Resistance Exercise In Older Adult. American College of Sports Medicine: 2022 Annual Meeting and World Congress. (May 31-Jun 4, 2022).
72. Wong M (Author & Presenter), Liu YE (Author), Kennedy S (Author), Lowe D (Author), Kelly N (Author), Wong JMW (Author), Ebbeling CB (Author), **Irving B** (Author), Ludwig D, (Author), Weiss, E (Author), Heymsfield S (Author), Shepherd J (Author). Predicting Body Composition Change from Change in Body Shape. Obesity Week 2021 (Virtual). (November 1-5, 2021).
71. Zunica ERM (Author & Presenter), Axelrod CL (Author), Davuluri G (Author), Dantas WS (Author), Spielmann G (Author), Cho E (Author), **Irving BA** (Author), Kirwan JP (Author). Gilmore, L.A. "Calorie Restriction Induces Skeletal Muscle Wasting and a Complex I defect While Reducing Mammary Tumor Growth in a Mouse Model of Diet Induced Obesity". AACR Annual Meeting 2020; April 27-28, 2020 and June 22-24, 2020; Philadelphia, PA.
70. Benotti P (Author & Presenter), Wood GC (Author), Browne J (Author), Hallowell P (Author), **Irving BA** (Author), Parikh M (Author), Morton J (Author), Fielding CR (Author), Samuels J (Author), Schwarzkopf R (Author), Suk M (Author), Still C (Author). Obesity Week 2019, "Comparative Knee Outcomes In Patients With Severe Obesity Following Total Knee Arthroplasty (Tka) And Surgical Weight Loss. Preliminary Results From The Swift Trial," ASMBs, Las Vegas, NV. (October 2019).
69. **Irving BA** (Author & Presenter). American College of Sports Medicine Annual Meeting, "Exercising to Mobilize and Re-energize Immune Cells in Health and Disease: From a Bioenergetics Perspective," American College of Sports Medicine, Orlando, FL. (June 1, 2019). (**Symposium**)
68. Vincelle C (Author & Presenter), Allerton T (Author), **Irving BA** (Author), Spielmann G (Author), Johannsen N (Author). American College of Sports Medicine Annual Meeting, "Metabolic Flexibility is Impaired in Response to Acute Exercise in the Young Offspring of Mothers with Type 2 Diabetes," American College of Sports Medicine, Orlando, FL. (June 1, 2019).
67. Scott MC (Author & Presenter), Fuller SE (Author), Watt JD (Author), Osborn ML (Author), Johannsen, NM (Author), **Irving BA** (Author), Noland RC (Author). American College of Sports Medicine Annual Meeting, "Cortical and Trabecular Bone Morphology in Response to Exercise and a Ketogenic Diet," American College of Sports Medicine, Orlando, FL. (May 31, 2019).

66. Cho E (Author & Presenter), Lemoine N (Author), Theall B (Author), Turner A (Author), Marucci J (Author), Mullenix S. (Author), Calvert D (Author), MacLellan M (Author), Kuznetsova N (Author), **Irving BA** (Author), Johannsen NM (Author), Spielmann G (Author). American College of Sports Medicine Annual Meeting, "Identification Of Blood Biomarkers Of Mild Traumatic Brain Injury In Collegiate Football Players," American College of Sports Medicine, Orlando, FL. (May 31, 2019).
65. Davis B (Author & Presenter), Stampley JE (Author), Wood GC (Author), Mitchell DC (Author), Jensen GL (Author), Liu Y-H (Author), Gao X (Author), Whilden B (Author), Yohn M (Author), Cunningham K (Author), Lemotte M (Author), Still CD (Author), **Irving BA** (Author). American College of Sports Medicine Annual Meeting, "Association between Dietary Quality and Fatigability among the Elderly in the Geisinger Rural Aging Study," American College of Sports Medicine, Orlando, FL. (May 30, 2019). (3rd Place Aging Interest Group Student Award)
64. Stampley JE (Author & Presenter), Davis B (Author), Wood GC (Author), Mitchell DC (Author), Jensen GL (Author), Liu Y-H (Author), Gao X (Author), Whilden B (Author), Yohn M (Author), Cunningham K (Author), Lemotte M (Author), Still CD (Author), **Irving BA** (Author). American College of Sports Medicine Annual Meeting, "Association between Fatigability and Physical Function among the Elderly in the Geisinger Rural Aging Study," American College of Sports Medicine, Orlando, FL. (May 30, 2019).
63. Martone M (Author & Presenter), Mullenix S (Author), Lemoine, Jr, N (Author), Marucci J (Author), Calvert D (Author), Church TS (Author), Harrell B (Author), Spielmann G (Author), **Irving BA** (Author), Rood J (Author), Poole L (Author), Johannsen N (Author). American College of Sports Medicine Annual Meeting, "Perceived Energy and Well Being in Collegiate Football Players with and without Sick Cell Trait," American College of Sports Medicine, Orlando, FL. (May 30, 2019).
62. Wang H (Author & Presenter), Lemoine, Jr, N (Author), Martone M (Author), **Irving BA** (Author), Spielmann G (Author), Marucci J (Author), Mullenix S (Author), Calvert D (Author), Church TS (Author), Rood J (Author), Harrell B (Author), Johannsen N (Author). American College of Sports Medicine Annual Meeting, "Acute and Chronic Changes of Hematological Variables in College Football Athletes with Sick Cell Trait," American College of Sports Medicine, Orlando, FL. (May 29, 2019).
61. Theall B (Author & Presenter), Kuremsky C (Author), Cho E (Author), Wang H (Author), Hardin K (Author), Marucci J (Author), Mullenix S (Author), **Irving BA** (Author), Harrell B (Author), Johannsen N (Author), Spielmann G (Author). American College of Sports Medicine Annual Meeting, "Changes In Salivary Antimicrobial Protein Concentrations In Response To Maximal Exercise In Collegiate Swimmers," American College of Sports Medicine, Orlando, FL. (May 29, 2019).
60. Lowe A (Author & Presenter), Johannsen NM (Author), **Irving BA** (Author), Marucci J (Author), Mullenix S (Author), Nelson A (Author), Spielmann G (Author), Lind E (Author). American College of Sports Medicine Annual Meeting, "Performance Implications of Arousal State in Female Collegiate Soccer Players," American College of Sports Medicine, Orlando, FL. (May 29, 2019).
59. Still C (Author & Presenter), Lucher S (Author), Wood GC (Author), Seiler JL (Author), Seiler C (Author), Jamieson S (Author), **Irving BA** (Author), Benotti P (Author). Obesity Week, "The effects of bariatric surgery on knee outcomes in patients eligible for total knee arthroplasty. Early results from the SWIFT Trial," ASMBS, Nashville, TN, United States. (November 13, 2018).
58. Wang H (Author & Presenter), Spielmann G. (Author), **Irving BA** (Author), Marucci J (Author), Mullenix S (Author), Harrell B (Author), Sharp R (Author), Johannsen, N. M. (Author). American College of Sports Medicine Annual Meeting, "Changes in Collegiate Swim Anaerobic Performance Between Pre-Season and Post-Season," Minneapolis, MN. (May 2018).
57. Allerton TD (Author & Presenter), **Irving BA** (Author), Spielmann G (Author), Primeaux S (Author), Nelson A (Author), Landin D (Author), Johannsen NM (Author). American College of Sports Medicine Annual Meeting, "Components of Metabolic Flexibility Improve 48 Hours After High Intensity Interval Exercise," Minneapolis, MN. (May 2018).

56. Kuremsky CA (Author & Presenter), Wang H (Author), Johannsen NM (Author), Marucci J (Author), Mullenix S (Author), **Irving BA**, Sharp R (Author). American College of Sports Medicine Annual Meeting, "Correlations Between Serum Biomarkers of Stress and Subjective Measures of Well-Being in Collegiate Swimmers," Minneapolis, MN. (May 2018).
55. Lemoine, Jr. NP (Author & Presenter), Owens ME (Author), Wang H (Author), Marucci J (Author), Mullenix S (Author), Calvert D (Author), Nelson AG (Author), Castle RR (Author), **Irving BA** (Author), Spielmann G (Author), Church T (Author), Harell B (Author), Johannsen NM (Author). American College of Sports Medicine Annual Meeting, "Differential Sweat and Urine Electrolyte Responses in Collegiate Football Players with Sickle Cell Trait," Minneapolis, MN. (May 2018).
54. **Irving BA** (Author & Presenter), Allerton TD (Author), Spielmann G (Author), Primeaux S (Author), Nelson A (Author), Landin D (Author), Johannsen NM (Author). American College of Sports Medicine Annual Meeting, "Offspring of Mothers with Diabetes have Reduced Muscle Oxidative Capacity Measured by Near Infrared Spectroscopy," Minneapolis, MN. (May 2018).
53. Chen Y-F (Author & Presenter), **Irving BA** (Author), Tugan TR (Author). Society of Toxicology, "Antiretroviral Treatment Induces Mitochondrial Homeostasis Disruption and Mitochondrial DNA Instability to Promote Premature Endothelial Senescence," San Antonio. (March 11, 2018).
52. **Irving BA** (Author & Presenter). Annual ACSM Meeting, Optimizing Exercise and Diet for Insulin Sensitivity and Mitochondrial Function Symposium, "Identifying the Exercise Intensity and Mode to Enhance Mitochondrial Adaptations," American College of Sports Medicine, Denver, CO. (June 2017). **(Symposium)**
51. **Irving BA** (Author & Presenter), Johnson ML (Author), Lanza IR (Author), Robinson MM (Author), Konopka AR (Author), Klaus KA (Author), Nair SK (Author). American College of Sports Medicine Annual Meeting, "Impact of Sedentary Behavior on Insulin Sensitivity and Mitochondrial Oxidative Capacity in Inactive Obese Adults," Boston, MA. (June 2, 2016).
50. **Irving BA** (Author & Presenter), Wood GC (Author), Seiler C (Author), Cook A (Author), Still CD (Author), Benotti PN (Author). Obesity Week, "Impact of the Level of Obesity on Mobility in Patients Referred for Weight Management," Los Angeles, CA. (November 2, 2015).
49. Miele MM (Author), Wenrich BR (Author), Alaparthi R (Author), **Irving BA** (Author), Rovnyak D (Author). Experimental Nuclear Magnetic Resonance Conference, "Reproducibility and Time Dependence of Metabolites in Serum by ¹H NMR," Pacific Grove, CA. (April 19, 2015).
48. Wood GC (Author & Presenter), Benotti P (Author), Argyropoulos GA (Author), **Irving BA** (Author), Rolston DD (Author), Still CD (Author), Gerhard GS (Author). Obesity Week, "A Combined Clinical and Genetic Classification Score for Nonalcoholic Fatty Liver Disease (NAFLD) in Patients with Morbid Obesity," Boston, MA. (November 3, 2014).
47. Rolston DD (Author & Presenter), Wood GC (Author), Ellapan B (Author), Benotti PN (Author), Argyropoulos GA (Author), Deshpande A (Author) **Irving BA** (Author), Gerhard GS (Author), Obesity Week, "Ion-dependent Transporter Expression in Human Jejunum is Influenced by Body Mass Index (BMI)," Boston, MA. (November 3, 2014).
46. Fleming J (Author & Presenter), Rawson E (Author), **Irving BA** (Author), Benotti P (Author), McConnell T (Author), Seiler J (Author), Wood GC (Author), Still CD (Author). Obesity Week, "Physical Inactivity: A Potential Correlate of Weight Regain After Bariatric Surgery," Boston, MA. (November 3, 2014).
45. Konopka AR (Author & Presenter), Asante A (Author), Amols MH (Author), Lanza IR (Author), Johnson ML (Author), Robinson MM (Author), **Irving BA** (Author), Nair KS (Author). American Diabetes Association, "Aerobic Exercise Training Improves Insulin Sensitivity and Skeletal Muscle Mitochondrial Energetics in Women with Polycystic Ovary Syndrome," San Francisco, CA. (June 13, 2014).

44. Fleming JJ (Author & Presenter), Rawson ES (Author), Still CS (Author), Wood GC (Author), Bennotti, PN (Author), Seiler, JL (Author), McConnell TR (Author), **Irving BA** (Author) American College of Sports Medicine Annual Meeting, "Comparison of Methods for Estimating Resting Energy Expenditure in Post-Bariatric Surgery Patients," Orlando, FL. (May 28, 2014).
43. Wenrich BR (Author & Presenter), **Irving BA** (Author), Rovnyak D (Author). Experimental Nuclear Magnetic Resonance Conference, "Investigation into NMR Metabolomic Characterization of Human Type II Diabetic States," Boston, MA. (March 23, 2014).
42. Clasey JL (Author & Presenter), Bradley, KD (Author), Bradley JW (Author), **Irving BA** (Author), Crofford JJ (Author). Obesity Week, "A New BIA Equation Estimating the Fat-Free Mass of Young Non-Hispanic Black Women," Atlanta, GA. (November 11, 2013).
41. **Irving BA** (Author & Presenter), Roesch S (Author), Kane C (Author), Styer A (Author), Argyropoulos, G (Author). Endocrine Society Annual Meeting, "AgRP Deficient Female but not Male Mice have Hypothalamic Mitochondrial Oxidative Capacity," San Francisco, CA. (June 15, 2013).
40. Clasey JL (Author & Presenter), Bradley KD (Author), Bradley JW (Author), **Irving BA** (Author), Crofford LJ (Author). The Obesity Society, "A Comparison of Body Composition Assessment Methods in Young Non-Hispanic Black Women," San Antonio, TX. (September 20, 2012).
39. Almandoz J (Author & Presenter), Howell L (Author), Grothe K (Author), **Irving BA** (Author), Signh E (Author), Nelson R (Author), Miles J (Author). American Diabetes Association, "Relationship between Body Fat Depots and Spillover of Fatty Acids from Chylomicrons in Subjects with Type 2 Diabetes: Effect of Weight Loss," Philadelphia, PA. (June 8, 2012).
38. Clasey JL (Author & Presenter), Bradley KD (Author), Bradley JW (Author), **Irving BA** (Author), Crofford LJ (Author). American College of Sports Medicine Annual Meeting, "A New BIA Equation Estimating the Body Composition of Young Non-Hispanic Black Women," San Francisco. (May 29, 2012).
37. Almandoz J (Author & Presenter), Howell J. (Author), Grothe K (Author), **Irving BA** (Author), Nelson R (Author), Miles J (Author). American Association of Clinical Endocrinologist, "Strategy for Weight Loss Through Multidisciplinary Lifestyle Approach Focusing on Calorie Deficit in Obese Patients with Type 2 Diabetes," Philadelphia, PA. (May 23, 2012).
36. Angadi S (Author & Presenter), Weltman N (Author), Patrie J (Author), Barrett E (Author), Weltman, A (Author), Brock, D (Author), **Irving BA** (Author), Davis C (Author), Rodriguez J (Author), Gaesser GA (Author). Experimental Biology, "Effects of a Low-Carbohydrate versus High-Carbohydrate, High-Fiber Diet on Soluble Cell Adhesion Molecules and Endothelial Function in Adults with Metabolic Syndrome," San Diego. (April 21, 2012).
35. **Irving BA** (Author & Presenter), Lanza IR (Author), Henderson GC (Author), Weymiller A (Author), Nair KS (Author). Experimental Biology, "Endurance, Resistance, and Combined Training Increase Mixed Muscle Protein Synthesis Independently of Age," San Diego. (April 21, 2012).
34. **Irving BA** (Author & Presenter), Weymiller A (Author), Syed S (Author), Karakelides H (Author), Soop, M (Author), Carter RE (Author), Nair KS (Author). American Diabetes Association, "Amino Acid Metabolites and Insulin Resistance in Human. American Diabetes Association," San Diego, CA. (June 24, 2011).
33. Weymiller A (Author & Presenter), **Irving BA** (Author), Carter RE (Author), Persson M (Author), Tatpatti L (Author), Bhagra S (Author), Soop M (Author) Nair KS (Author). American Diabetes Association, "Metformin and Pioglitazone Altered Plasma Amino Acid Metabolites – Potential Biological Markers of Insulin Sensitivity," San Diego, CA. (June 24, 2011).
32. **Irving BA** (Author & Presenter), Lanza IR (Author), Henderson GC (Author), Weymiller A (Author), Schimke J (Author), Morse D (Author) Nair KS (Author). American College of Sports Medicine Annual

Meeting, "Effect of Exercise Training Modality on Skeletal Muscle mRNA Abundance in Young and Older Adults. American College of Sports Medicine," Denver, CO. (June 1, 2011).

31. Sawyer BJ (Author & Presenter), **Irving BA** (Author), Patrie J (Author), Angadi S (Author) Gaesser G A (Author). American College of Sports Medicine Annual Meeting, "Percent Body Fat is Positively Correlated to Walking and Running Economy/Efficiency in Healthy Adults," Denver. (June 1, 2011).
30. **Irving BA** (Author & Presenter), Lanza IR (Author), Henderson GC (Author), Weymiller A (Author), Schimke J (Author), Morse D. (Author) Nair KS (Author), Experimental Biology, "Effect of Exercise Training Modality on Skeletal Muscle Mitochondrial Biogenesis in Young and Older Adults," Washington. (March 17, 2011).
29. Gaesser GA (Author & Presenter), Angadi S (Author), Weltman N (Author), Rodriguez J (Author), Patrie J (Author) Barrett E (Author), Brock D (Author), Davis C (Author), **Irving BA** (Author), Experimental Biology, "Impairment of Endothelial Function Despite Improvements in Traditional Lipid Markers in Low-Carbohydrate vs. High-Carbohydrate, High-Fiber Diet in Adults with Metabolic Syndrome," Washington. (March 17, 2011).
28. Lanza IR (Author & Presenter), **Irving BA** (Author), Henderson GC (Author), Nair KS (Author), Experimental Biology, "Mitochondrial Oxidative Capacity and Coupling: Effects of Aging and Exercise Training," Washington, DC. (March 17, 2011).
27. **Irving BA** (Author & Presenter), Karakiledes H (Author), Nair KS (Author). American Diabetes Association, "Association between of Insulin Sensitivity, Skeletal Muscle Mass, Fat Mass, Fitness, Age, and Sex," Orlando, FL. (June 25, 2010).
26. Muniyappa R (Author), **Irving BA** (Author), Unni U (Author), Lee, HW (Author) Nair KS (Author), Quon MJ (Author), Kurpad AV (Author). American Diabetes Association, "Comparative Evaluation of Surrogate Indices of Insulin Sensitivity/Resistance in Asian Indian Men Using a Calibration Model," Orlando, FL. (June 25, 2010).
25. Gaesser GA (Author & Presenter), Angadi S (Author), Davis C (Author), **Irving BA** (Author), Patrie J (Author), Weltman A (Author), Barrett EJ (Author), Brock D (Author). American Dietetic Association, "Effects of a Low-Fat, High-Fiber Diet Compared with a Low-Carbohydrate Diet on Insulin Sensitivity and Endothelial Function in Adults with the Metabolic Syndrome." (October 17, 2009).
24. **Irving BA** (Author & Presenter). American Aging Association, "DHEA in Men and Women," Scottsdale, AZ. (May 28, 2009).
23. **Irving BA** (Author & Presenter), Rynders CA (Author), Angadi SS (Author), Weltman NY (Author), Gaesser GA (Author), Weltman A. (Author). American College of Sports Medicine Annual Meeting, "Abdominally Obese Women with the Metabolic Syndrome Have Higher Maximal Fat Oxidation Rates During Submaximal Treadmill Exercise Compared to Lean Women," Seattle, WA. (May 27, 2009).
22. Srinivasan M (Author & Presenter), **Irving BA** (Author), Frye RL (Author), O'Brien P (Author), Hartman SJ (Author), McConnell JP (Author), Nair KS (Author). Joint Conference of the 49th Cardiovascular Disease Epidemiology and Prevention-and-Nutrition, Physical Activity and Metabolism, "Impact of Long-Term Replacement with Dehydroepiandrosterone (DHEA) on Lipoprotein Profile in Elderly Males and Females," Palm Harbor, FL. (March 10, 2009).
21. Jaleel A (Author & Presenter), Karakelides H (Author), Klaus K (Author), Morse D (Author), Ward L (Author), **Irving BA** (Author), Nair KS (Author). American Diabetes Association, "Alteration of Plasma Protein Synthesis by Insulin Treatment in Type 1 Diabetes," San Francisco, CA. (June 6, 2008).
20. **Irving BA** (Author & Presenter), Bigelow M (Author), Asmann Y (Author), Chow L (Author), Coenen-Schimke J (Author), Klaus KA (Author), Guo Z (Author), Raghavakaimal S (Author), Nair KS (Author).

American Diabetes Association, "Asian Indians have Enhanced Skeletal Muscle Mitochondrial Capacity to Produce ATP in Association with Severe Insulin-Resistance," San Francisco, CA. (June 6, 2008).

19. Bhagra S (Author & Presenter), Schimke JM (Author), Stump C (Author), Halvatsiotis P (Author), **Irving BA** (Author), Nair, KS (Author). American Diabetes Association, "Insulin Modulates in vivo Myosin Heavy Chain (MHC) Isoform Transcription in Humans," San Francisco, CA. (June 6, 2008).
18. Srinivasan M (Author & Presenter), **Irving BA** (Author), Dhataryia K (Author), Klaus K (Author), Hartman SJ (Author), McConnell JP (Author), Nair KS (Author). American College of Cardiology, "Effect of Dehydroepiandrosterone (DHEA) Replacement on Lipoprotein Profile in Hypoadrenal Women.," Chicago, IL. (March 29, 2008).
17. **Irving BA** (Author & Presenter), Bigelow M (Author), Asmann Y (Author), Chow L (Author), Schimke, J (Author), Raghavakaimal S. (Author), Nair KS (Author). Magnuson Congress for a Global Diabetes Alliance, "Investigation on Pathophysiology of Type 2 Diabetes Among Asian Indians," Seattle, WA. (October 22, 2007).
16. Karakelides H (Author & Presenter), Irving BA (Author), Bigelow M (Author), Short KR (Author), Kahl J (Author), Nair KS (Author). American Diabetes Association, "Adiponectin and Insulin Action – Impact of Age, Body Composition, and Cardiorespiratory Fitness," Chicago, IL. (June 22, 2007).
15. Tatpati LL (Author & Presenter), **Irving BA (Author)**, Kahl J (Author), Klaus K. (Author), Short, KR (Author), Nair KS (Author). American Diabetes Association, "Branched Chain Amino Acids Effect on Skeletal Muscle Mitochondrial ATP Production and Protein Metabolism – Interaction with Insulin and Age," Chicago, IL. (June 22, 2007).
14. Raghavakaimal S (Author & Presenter), Bigelow M (Author), **Irving BA** (Author), Chow L. (Author), Asmann Y (Author), Kahl J. (Author), Schimke J. (Author), Nair KS (Author), American Diabetes Association, "Insulin Resistance and Altered Gene Transcript Levels in Asian Indians Compared to Americans of North European Origin," Chicago, IL. (June 22, 2007).
13. **Irving BA** (Author & Presenter), Swift DL (Author), Davis CK (Author), Barrett EJ (Author), Gaesser, GA (Author), Weltman A (Author). American College of Sports Medicine Annual Meeting, "Effects of Exercise Training Intensity on Cardiometabolic Risk in Women with the Metabolic Syndrome with or without Hypertension," New Orleans, LA. (May 30, 2007).
12. Davis CK (Author & Presenter), **Irving BA** (Author), Brock DW (Author), Gaesser, GA (Author), Barrett EJ (Author), Weltman A (Author). American College of Sports Medicine Annual Meeting, "Exercise Training-Induced Changes in Skeletal Muscle Microvasculature Assessed by Contrast Enhanced Ultrasound," New Orleans, LA. (May 30, 2007).
11. Weltman A (Author & Presenter), **Irving BA** (Author), Swift DL (Author), Davis CK (Author), Rodriguez J (Author), Frick K (Author), Barrett EJ (Author), Gaesser GA (Author). American College of Sports Medicine Annual Meeting, "Exercise-Induced Weight Loss and Biological/Behavioral Compensation in Women with the Metabolic Syndrome (MS)," New Orleans. (May 30, 2007).
10. **Irving BA** (Author & Presenter), Brock DW (Author), Davis CK (Author), Swift DL (Author), Barrett EJ (Author), Gaesser GA (Author) Weltman A (Author). North American Association for the Study of Obesity, "The Hypertriglyceridemic Waist (HTGW) Exacerbates Risk in Women with the Metabolic Syndrome," Boston, MA. (October 20, 2006).
9. **Irving BA** (Author & Presenter), Weltman JY (Author), Davis CK (Author), Swift DL (Author), Brock DW (Author), Patrie J. (Author), Barrett EJ (Author), Gaesser GA (Author), Weltman A (Author). Endocrine Society Meeting, "Effects of Exercise Training Intensity on Growth Hormone (GH) Secretion in Abdominally Obese Individuals with the Metabolic Syndrome (MS)," Boston, MA. (June 24, 2006).
8. **Irving BA** (Author & Presenter), Weltman, JY (Author), Davis CK (Author), Swift DL (Author), Brock DW (Author), Barrett EJ (Author), Gaesser GA (Author), Weltman A (Author). American Diabetes

Association Meeting, "Effects of Exercise Training Intensity on Abdominal Fat in Abdominally Obese Individuals with the Metabolic Syndrome," Washington, DC. (June 8, 2006).

7. Brock DW (Author & Presenter), **Irving BA** (Author), Davis CK (Author), Barrett EJ (Author), Gaesser, GA (Author), Weltman A. (Author), American College of Sports Medicine Annual Meeting, "Differential Impact of Chronic High-Carbohydrate vs. Low-Carbohydrate Diets on Endothelial Function in Adults with the Metabolic Syndrome," Denver, CO. (May 31, 2006).
6. **Irving BA** (Author & Presenter), Brock DW (Author), Davis CK (Author), Swift, DL (Author), Barrett EJ (Author), Gaesser GA (Author), Weltman A (Author). American College of Sports Medicine Annual Meeting, "Relationship among Fitness, Activity, Visceral Fat, and Associated Risk Factors in Women with the Metabolic Syndrome (MS)," Denver, CO. (May 31, 2006).
5. Gaesser GA (Author & Presenter), Clark BR (Author), Parker BE (Author) Olowin AB. (Author), Richardson NT (Author), Blessinger JR (Author) Davis CK, Welk GJ (Author), **Irving BA** (Author), American College of Sports Medicine Annual Meeting, "Validation of an Integrated Heart Rate/Physical Activity Monitor," Denver. (May 31, 2006).
4. Sawyer BJ (Author & Presenter), Blessinger JR (Author), **Irving BA** (Author), Davis CK (Author), Weltman A (Author), Gaesser GA (Author). American College of Sports Medicine Annual Meeting, "Walking and Running Economy are Weakly Inversely Correlated to Maximal Oxygen Consumption in Healthy Males and Females," Denver, CO. (May 31, 2006).
3. **Irving BA** (Author & Presenter), Rutkowski JR (Author), Davis CK (Author), Brock DW (Author), Gaesser GA (Author), Weltman A (Author). American College of Sports Medicine Annual Meeting, "Ratings of Perceived Exertion and the Blood Lactate Response to Exercise: Borg vs. Omni," Nashville, TN. (May 28, 2005).
2. Henley MO (Author & Presenter), **Irving BA** (Author), Gaesser GA (Author). American College of Sports Medicine Annual Meeting, "Effect of Single- and Multiple-Set Resistance Exercise on Postexercise Energy Expenditure," Indianapolis, IN. (June 6, 2004).
1. **Irving BA** (Author & Presenter), Anderson SM (Author), Weltman JY (Author), Watson-Winfield DD (Author), Frick KI (Author), Evans WS (Author), Veldhuis JD (Author), Weltman A (Author). American College of Sports Medicine Annual Meeting, "Time of Exercise Initiation Does Not Affect Metabolic and Performance Responses During Acute Exercise," San Francisco, CA. (May 28, 2003).

Regional

11. **Irving BA**. South East Athletic Trainers Association, "Introduction to Biosensors and their Role in Wellness Assessment and Interventions," Atlanta, GA. (March 9, 2018).
10. Chen YF (Author & Presenter), **Irving BA** (Author), Dugas TR (Author). South Central Chapter of the Society of Toxicology, "Chronic Antiretroviral Treatment Disrupts Mitochondrial Homeostasis and Induces Mitochondrial Genome Instability To Promote Premature Endothelial Senescence (Top Student Presentation)," Baton Rouge, LA. (October 19, 2017).
9. **Irving BA** (Author & Presenter), Malin S (Author & Presenter). Southeast American College of Sports Medicine Annual Meeting, "Design of the "Exercise Drug" for Skeletal Muscle and Vascular Insulin Resistance (Symposium)," Greenville, SC. (February 19, 2016). (**Symposium**)
8. Fleming JJ (Author & Presenter), Rawson ES (Author), Still CS (Author), Wood GC. (Author), Benotti, PN (Author), Seiler JL (Author), McConnell TR (Author), **Irving BA** (Author). Mid-Atlantic American College of Sports Medicine, "Comparison of Methods for Estimating Resting Energy Expenditure in Post-Bariatric Surgery Patients," Harrisburg, PA. (November 1, 2013).
7. Sawyer BJ (Author & Presenter), **Irving BA** (Author), Patrie JP (Author), Angadi S (Author), Weltman A (Author) Gaesser GA (Author). Southwest American College of Sports Medicine, "Percent Body Fat is

Positively Correlated to Walking and Running Economy/Efficiency in Healthy Men and Women," San Diego, CA. (October 23, 2009).

6. Sawyer BJ (Author & Presenter), Blessinger JR (Author), Davis CK (Author), **Irving BA** (Author), Weltman A (Author) Gaesser GA (Author). Southwest American College of Sports Medicine, "The Slope of the VO₂ Relationship During Walking and Running is Positively Correlate to VO₂ Peak in Healthy Males and Females," San Diego, CA. (November 14, 2008).
5. **Irving BA** (Author & Presenter), Brock DW (Author), Davis CK (Author), Barrett EJ (Author), Gaesser GA (Author), Weltman A (Author). Southeast American College of Sports Medicine Annual Meeting, "Relationship among Cardiorespiratory Fitness (CRF), Physical Activity (PA), Abdominal Visceral Fat (AVF), Endothelial Function and Associated Risk Factors in Women with the Metabolic Syndrome (MS)," Charlotte, NC. (February 9, 2006).
4. Blessinger JR (Author & Presenter), Sawyer BJ (Author), **Irving BA** (Author), Davis CK (Author), Weltman A (Author). Southeast American College of Sports Medicine Annual Meeting, "Test-Retest Reliability of the Sensormedics VmaxST Portable Metabolic Measurement System," Charlotte, NC. (February 9, 2006).
3. Gaesser GA (Author & Presenter), Clark BR (Author), Parker BE (Author), Olowin AB (Author), Richardson NT (Author), Blessinger JR, Sawyer BJ (Author), Davis CK (Author), Welk GJ (Author), **Irving BA** (Author). Southeast American College of Sports Medicine Annual Meeting, "Validation of an Integrated Heart Rate/Physical Activity Monitor," Charlotte, NC. (February 9, 2006).
2. Sawyer BJ (Author & Presenter), Blessinger JR (Author), **Irving BA** (Author), Davis CK (Author), Weltman A (Author), Gaesser GA (Author). Southeast American College of Sports Medicine Annual Meeting, "Walking and Running Economy are Weakly Inversely Correlated to Maximal Oxygen Consumption in Healthy Males and Females," Charlotte, NC. (February 9, 2006).
1. Brock, D. W., Irving, B. A., Davis, C. K., Barrett, E. J., Gaesser, G. A., Weltman, A., (February 2006) Differential Impact of Chronic High-Carbohydrate vs. Low-Carbohydrate Diets on Endothelial Function in Adults with the Metabolic Syndrome, Poster, Southeast American College of Sports Medicine Annual Meeting, Charlotte, NC

COVID19 - Abstracts/Presentations Accepted for Presentation (Meetings Cancelled)

11. Zunica E, Axelrod C, King W, Spielmann G, **Irving BA**, Alexopoulos S, Hoehn K, Davuluri G, Dantas W, Hoppel C, Gilmore AL, Kirwan J. Antitumor Effects of BAM15 in Obese Mice With Triple Negative Breast Cancer. In: OBESITY. Vol. 28. 2020. p. 7-7.
10. Quiariarte H, Lemoine N, Wang H, Martone M, Matthews R, Calvert D, Marucci J, Etheredge S, Spielmann G, **Irving BA**, Johannsen N. Characterization Of Normal Biomarkers Of Muscle Damage In Collegiate Athletes. In: MEDICINE AND SCIENCE IN SPORTS AND EXERCISE. Vol. 52. 17th ed. 2020. p. 977-977.
9. Martone M, Bouchard C, Rankinen T, **Irving BA**, Johannsen N, Spielmann G. Cmv Serostatus Has A Negative Effect On Cardiorespiratory Fitness And Insulin Sensitivity In Sedentary African-americans. In: MEDICINE AND SCIENCE IN SPORTS AND EXERCISE. Vol. 52. 17th ed. 2020. p. 521-521.
8. Spielmann G, Campbell J, Singh M, Church T, Irving BA, Johannsen N. EFFECTS OF AEROBIC AND RESISTANCE EXERCISE ON BIOMARKERS OF B-CELL ACTIVATION IN TYPE 2 DIABETES. In: MEDICINE AND SCIENCE IN SPORTS AND EXERCISE. Vol. 52. 17th ed. 2020. p. 128-129.
7. Allerton TD, Ravussin E, Rood J, **Irving BA**, Lemoine N, Mullenix S, Marucci J, Johannsen N. Energy Expenditure Measured Overnight In A Whole-room Indirect Calorimeter In Four Collegiate American-style Football Linemen. In: MEDICINE AND SCIENCE IN SPORTS AND EXERCISE. Vol. 52. 17th ed. 2020. p. 343-343.

6. Stampley JE, Kennedy S, Scott MC, Davis B, Quiariarte H, Johannsen N, Heymsfield SB, Greenway F, Spielmann G, **Irving BA**. Evaluation Of 3D Body Imaging To Estimate Percentage Body Fat In Older Adults. In: MEDICINE AND SCIENCE IN SPORTS AND EXERCISE. Vol. 52. 17th ed. 2020. p. 148-148.
 5. Cho E, Theall B, Stampley J, Davis B, Quiariarte H, Greenway F, Johannsen N, Spielmann G, **Irving BA**. Light Physical Activity Is Associated With Reduced Signs Of Immune Aging In Healthy Older Adults. In: MEDICINE AND SCIENCE IN SPORTS AND EXERCISE. Vol. 52. 17th ed. 2020. p. 127-128.
 4. Gosalia J, Hanna R, Vairo G, **Irving BA**, McCully K, Proctor D. Reproducibility of NIRS Oxidative Capacity Measurements in the Vastus Lateralis and Medial Hamstring Muscles. In: FASEB JOURNAL. Vol. 34. 2020.
 3. Scott MC, Stampley J, Davis B, Quiariarte H, Cho E, Theall B, Granger J, Johannsen N, Heymsfield SB, Greenway F, Spielmann G, **Irving BA**. Trabecular Bone Score And Bone Mineral Density In Older Adults. In: MEDICINE AND SCIENCE IN SPORTS AND EXERCISE. Vol. 52. 17th ed. 2020. p. 70-70.
 2. Proctor DN, Hanna RB, Gosalia J, Hobson Z, Delgado J, Demalis A, Vairo GL, Mookerjee S, **Irving BA**, McCully KK. A Time-Efficient NIRS Protocol For Cross- And Within-limb Comparisons Of Muscle Oxidative Capacity. In: MEDICINE AND SCIENCE IN SPORTS AND EXERCISE. Vol. 52. 17th ed. 2020. p. 84-84.
 1. Davis B, Stampley J, Quiariarte H, Cho E, Theall B, Granger J, Scott MC, Heymsfield SB, Greenway F, Johannsen N, Spielmann G, **Irving BA**. Associations Between Physical Fatigability, VO₂ Peak And Measures Of Muscle Strength In Older Adults. In: MEDICINE AND SCIENCE IN SPORTS AND EXERCISE. Vol. 52. 17th ed. 2020. p. 338-338.
- (Note: Stampley J was listed as Sampley J in abstract book)**

Invited Talk

14. **Irving BA** (Author & Presenter). 13th Annual Course - Isotope Tracers in Metabolic Research: Principles and Practice of Kinetic Analysis, "Methods in Protein Metabolism", (Virtual). (November 11, 2021). Sponsor: Vanderbilt Mouse Metabolic Phenotyping Core and the NIDDK.
13. **Irving BA** (Author & Presenter). Physiology Research Seminar. LSUHSC, "Prescribing Exercise to Enhance Mitochondrial Adaptations," New Orleans, LA. (February 23, 2017).
12. **Irving BA** (Author & Presenter). PERFORM Colloquium, "Prescribing Exercise to Enhance Mitochondrial Adaptations," PERFORM Centre, University of Concordia, Montreal, Canada. (September 21, 2016).
11. **Irving BA** (Author & Presenter). University of Georgia - Kinesiology, "Impact of Exercise Training on Mitochondrial Bioenergetics and Protein Turnover," Athens, GA. (April 9, 2014).
10. **Irving BA** (Author & Presenter). Penn State University – Hershey, "Skeletal Muscle Remodeling in Aging: Impact of Exercise Training Modality," Hershey, PA. (February 22, 2013).
9. **Irving BA** (Author & Presenter). "Mitochondrial Dysfunction in Aging and its Impact on Fuel Selection," Bjornorp Symposium, Maastricht, Netherlands. (November 7, 2012).
8. **Irving BA** (Author & Presenter). Noll Laboratory Research Seminar (Penn State University), "Skeletal Muscle Remodeling in Aging: Impact of Exercise Training Modality," State College, PA. (September 7, 2012).
7. **Irving BA** (Author & Presenter). University of Utah's Metabolism Interest Group, "Skeletal Muscle Remodeling in Aging: Impact of Exercise Modality," Salt Lake City, UT. (January 13, 2011).
6. **Irving BA** (Author & Presenter). Endocrine Research Seminar, "Skeletal Muscle Remodeling in Aging: Impact of Exercise Modality," Rochester, MN. (December 7, 2010).

5. **Irving BA** (Author & Presenter). University of Oregon, "Potential Counter Measures to Prevent and/or Delay Age-Related Skeletal Muscle Dysfunction," Eugene, OR. (January 21, 2010).
4. **Irving BA** (Author & Presenter). University of Florida's Institute on Aging, "Potential Counter Measures to Prevent and/or Delay Age-Related Skeletal Muscle Dysfunction," Gainesville, FL. (January 11, 2010).
3. **Irving BA** (Author & Presenter). Mayo Clinic, "Impact of Exercise Intensity on Abdominal Visceral Fat (AVF) and Risk Factors Associated with the Metabolic Syndrome," Rochester, MN. (October 19, 2006).
2. **Irving BA** (Author & Presenter). Washington University, "Impact of Exercise Intensity on Abdominal Visceral Fat (AVF) and Risk Factors Associated with the Metabolic Syndrome," St. Louis, MO. (January 24, 2006).
1. **Irving BA** (Author & Presenter). University of Virginia's Strength and Conditioning Symposium (NSCA CME), Understanding Your Sports Medicine Team Member's Role, "Measurement and Evaluation: Athletic Performance," Charlottesville, VA. (October 8, 2005).

Local

9. Chen Y-F (Author & Presenter), Stampley JE (Author), **Irving BA** (Author), Dugas TR (Author), Phi Zeta Research Day, "Antiretroviral Treatment Induces Mitochondrial Homeostasis Disruption and Mitochondrial DNA Instability to Promote Premature Endothelial Senescence," Louisiana State University, Baton Rouge. (February 28, 2018).
8. Miele M (Author & Presenter), Alaparthi R (Author), Wenrich B (Author), **Irving BA** (Author), Rovnyak D (Author). Bucknell Geisinger Research Initiative, "Reproducibility of Metabolite Levels in Serum by High Field NMR," Danville, PA. (March 15, 2015).
7. Alaparthi R (Author & Presenter), Miele M (Author), Wenrich B (Author), **Irving BA** (Author), Rovnyak D (Author). Susquehanna Valley Undergraduate Research Symposium, "Method Validation of NMR Metabolite Measurements," Danville, PA. (August 5, 2014).
6. **Irving BA** (Author & Presenter), Roesch S (Author), Kane C (Author), Styer A (Author), Argyropoulos G (Author). Bucknell Geisinger Research Initiative, "AgRP Deficient Female Mice have Increased Body Weight and Hypothalamic Mitochondrial Oxidative Capacity. Bucknell Geisinger Research Initiative," Lewisburg, PA. (November 28, 2012).
5. **Irving BA** (Author & Presenter). Endocrine Research Seminar, "Does DHEA Enhance the Response to Exercise in Postmenopausal Women?" Rochester, MN. (May 9, 2007).
4. Davis CK (Author & Presenter), **Irving BA** (Author), Brock DW (Author), Barrett EJ (Author), Gaesser GA (Author), Weltman A (Author). Presented at the University of Virginia's 18th Annual Children's Hospital Research Symposium, "The Effects of Exercise Training on Microvascular Properties of Muscle Assessed by Contrast Ultrasound," Charlottesville. (May 11, 2006).
3. **Irving BA** (Author & Presenter), Brock DW (Author), Davis CK (Author), Patrie J (Author), Swift DL (Author), Barrett EJ (Author), Gaesser GA (Author), Weltman A (Author). University of Virginia's General Clinical Research Center Symposium, "Impact of Exercise Intensity on Abdominal Visceral Fat (AVF) and Risk Factors Associated with the Metabolic Syndrome," Charlottesville, VA. (November 8, 2005).
2. **Irving BA** (Author & Presenter). University of Virginia's Strength and Conditioning Symposium (NSCA CME), Understanding Your Sports Medicine Team Member's Role, "Measurement and Evaluation: Athletic Performance," Charlottesville, VA. (October 8, 2005).
1. **Irving BA** (Author & Presenter), Anderson SM (Author), Weltman JY (Author), Watson-Winfield DD (Author), Frick KI (Author), Evans WS (Author), Veldhuis JD (Author), Weltman A (Author). University of Virginia's Graduate Student Presentation Day and Slaughter Lecture, "Time of Exercise Initiation Does Not Affect Metabolic and Performance Responses During Acute Exercise," Charlottesville, VA. (April 21, 2004).

Contract, Fellowships, Grants and Sponsored Research

Currently Under Review

Funded

26. Allerton T (Principal-Investigator), Soto P (Co-Principal), Stephens J (Co-Investigator), **Irving BA** (Co-Investigator), "Effect of Altered Nitric Oxide Bioavailability on the Interaction of Obesity and Alzheimer's Disease," Sponsored, "Sponsored by Pennington Biomedical Research Center | 02, National Institutes of Health (NIH), Total \$57,400.00 (Sub-Award: \$5,500). (August 2020 - August 2021).
25. **Irving BA** (Principal-Investigator, Mentor), Quiariarte H (Graduate Student Mentee), Spielmann G (Co-Investigator), Johannsen N (Co-Investigator), Greenway F (Co-Investigator). "3R21 AG058181-02: Diversity Supplement for Heather Quiariarte," Sponsored by National Institutes of Health - NIH, \$30,094.00. (Oct 1, 2019 - Jun 30, 2021).
24. **Irving BA** (Principal-Investigator), Spielmann G (Co-Investigator), Johannsen N (Co-Investigator), Davis B (Co-Investigator). Impact of Low-Intensity Resistance Exercise with and without Blood Flow Redistricted (BFR) on Muscle Mitochondrial Oxidative Capacity – Pilot Study, Peabody Society Dean's Circle Grant Program, \$5000 proposed, \$5000 awarded. (July 1, 2019 - June 30, 2021)
23. **Irving BA** (Principal), Spielmann G (Co-Investigator) Johannsen N (Co-Investigator), "R21AG058181-01-A1: Resistance Exercise and Low-Intensity Physical Activity Breaks in Sedentary Time to Improve Skeletal Muscle and Cardiometabolic Health in Older Adults REALPA Breaks in Sedentary Time Pilot Study," Sponsored by National Institutes of Health - NIH, \$419,000.00. (July 15, 2018 - July 14, 2022).
22. Allerton T (Principal-Investigator), **Irving BA** (Co-Investigator, Site-PI), Losso J (Supporting), Early, K. (Supporting), "The Effects Watermelon Juice Supplementation on Postprandial Vascular Endothelial Function and Blood Flow During Hyperglycemia: A Pilot Study," Sponsored by National Watermelon Promotion Board, Total \$19,054.00 (Sub-Award: \$4,430). (May 2019 - April 2020).
21. **Irving BA** (Principal-Investigator), Spielmann G (Principal-Investigator) "Does Age Related Declines in T-Cells Mitochondrial Respiratory Function Associate with Immunosenescence in Inactive Postmenopausal Women," Sponsored by LSU Faculty Research Grant, \$10,000.00. (July 2016 – June 2018).
20. **Irving BA** (Principal Investigator, Mentor), James Stampley (Doctoral Student, Mentee), Neil Johannsen (Co-Mentor), Guillaume Spielman (Co-Mentor), "Economic Development Assistantship," Sponsored by LSU Graduate School, \$100,000.00. (July 1, 2018 - June 30, 2022).
19. **Irving BA** (CoI, and Sub-Award Principal-Investigator). "Surgical Weight-Loss to Improve Functional Status Trajectories Following Total Knee Arthroplasty (SWIFT Trial)," Sponsored by Geisinger Clinic | Ethicon EndoSurgery, Total \$4,769,498 (Sub-Award \$38,701.00). (January 1, 2016 - December 31, 2020).
18. **Irving BA** (Principal-Investigator). "Impact of Blood Flow Restricted (BFR) Resistance Training on Muscle Mass, Strength, Quality, and Bioenergetics," Sponsored by Delfi, \$20,000.00. (December 1, 2017 - July 8, 2019).
17. **Irving BA** (Principal-Investigator), Carmichael O (Co-Principal-Investigator), "Mechanisms of Premature Muscle Fatigue in Sedentary and Exercise Trained Adults," Sponsored by LSU Biomedical Collaborative Research Program, \$69,500.00. (July 1, 2018 - June 30, 2019).
16. **Irving BA** (Principal-Investigator). "CHSE Dean's Auxiliary Travel Grant," Sponsored by CHSE Dean's Auxiliary, \$2,000.00. (July 2017).

15. Johannsen N (Principal-Investigator), Irving BA (Co-Investigator). "The Immediate and Extended Effects of High Intensity Interval Exercise on Metabolic Flexibility and Muscle Metabolism," Sponsored by LSU Dean's Circle, \$2,880.00. (July 1, 2016 - June 30, 2017).
14. **Irving BA** (Principal-Investigator). "GRAS: GRAS: Diet Quality, Functional Status and Quality Of Life Among 200 Community Dwelling Older Adults," Sponsored by Geisinger Obesity Institute, Dept of Agriculture - USDA, \$7,290.00. (January 1, 2016 - December 31, 2016).
13. **Irving BA** (Principal-Investigator). "Changes in Objectively-Measured Physical Activity and Sedentary Behavior Among Bariatric Surgery Patients (\$25,000)," Sponsored by Geisinger Obesity Institute, National Institutes of Health - NIH, \$8,580.00. (August 17, 2015 - August 16, 2016).
12. **Irving BA** (Principal-Investigator). "CHSE Dean's Auxillary Faculty Travel Grant," Sponsored by CHSE Dean's Auxiliary, \$3,000.00. (July 2016).
11. **Irving BA** (Principal-Investigator), Rovnyak, D. (Co-Principal-Investigator), "NMR Metabolomic Characterization of Human Serum," Sponsored by Bucknell University-Geisinger Health System, \$39,239.00. (January 1, 2015 - December 31, 2015).
10. **Irving BA** (Principal-Investigator). "Quantitative Metabolomics, Type 2 Diabetes, and Bariatric Surgery," Sponsored by NIH/NIDDK (Mid-Atlantic NORC) P&F (**Declined to Move to LSU**), \$25,000.00. (December 1, 2014 - November 30, 2015).
9. **Irving BA** (Principal-Investigator). "Faculty and Junior Faculty Travel Grant," Sponsored by LSU Office of Research and Development, \$750.00. (November 3, 2015 - November 7, 2015).
8. Still C (Principal-Investigator), **Irving BA** (Co-Investigator). "The Collateral Impact of Bariatric Surgery on Families," Sponsored by Geisinger Health System, \$100,000.00. (August 1, 2013 - July 31, 2015).
7. Shuldiner A (Principal-Investigator), Still C (Co-Principal-Investigator), **Irving BA** (Co-Investigator), "Mid-Atlantic Nutritional Obesity Research Center (NORC): Clinical & Translational Research (CTR) Core CTR Satellite: Geisinger Medical Center, Danville Pa," Sponsored by NIH/NIDDK, \$761,735.00. (July 1, 2010 - June 30, 2015).
6. Still C (Principal-Investigator), Jensen G (Co-Principal-Investigator), **Irving BA** (Co-Investigator), Mitchell D (Co-Investigator), Wood GC (Co-Investigator). "Feasibility and Relative Validity of Internet-Based Dietary Assessment Tools and their Relationship to Body Composition and Physical Function in Rural Pennsylvanians," Sponsored by United States Department of Agriculture, \$180,058.00. (January 1, 2014 - December 31, 2014).
5. **Irving BA** (Principal-Investigator, Trainee), Nair KS (Co-Investigator, Mentor), Bergen R (Co-Investigator), "KL2 RR024151: Exercise Training and Individual Skeletal Muscle Protein Synthesis Rates in Aging Adults," Sponsored by NIH/NCRR, \$125,000.00. (July 1, 2007 - April 30, 2012).
4. Nair KS (Principal-Investigator), **Irving BA** (Co-Investigator). "R01 AG09531-(Administrative Supplement): Mechanism of Muscle Wasting in Aging Man," Sponsored by NIH/AG. (July 1, 2007 - June 30, 2008).
3. **Irving BA** (Postdoctoral Fellow), Eberhardt N (Principal), Nair, KS (Co-Investigator, Mentor), "T32 AT07352: Endocrinology and Metabolism Training Grant," Sponsored by NIH/NIDDK, \$53,054.00. (July 1, 2006 - June 30, 2007).
2. **Irving BA** (Predoctoral Fellow), Taylor AG (Principal-Investigator), Weltman A (Co-Investigator, Mentor). "T32 AT00052: NIH/NCCAM Training Grant." (August 1, 2001 - July 31, 2005).
1. Weltman A (Principal-Investigator), **Irving BA** (Co-Investigator). "Provost Research Grant," Sponsored by the University of Virginia. (July 1, 2001 - June 30, 2005).

Research Activity

On-Going

1. "Resistance Exercise and Low-Intensity Physical Activity Breaks in Sedentary Time to Improve Skeletal Muscle and Cardiometabolic Health in Older Adults REALPA Breaks in Sedentary Time Pilot Study" (On-Going)
2. "Impact of Blood Flow Restricted (BFR) Resistance Training on Muscle Mass, Strength, Quality, and Bioenergetics" (On-Going)
3. "Impact of Exercise Training on Skeletal Muscle Mitochondrial Bioenergetics and Oxidative Stress in Drosophila" (On-Going)
4. "Weight-Loss to Improve Functional Status Trajectories Following Total Knee Arthroplasty (SWIFT Trial)" (On-Going).
5. "Blood Cell Bioenergetic Method Optimization and Training Protocol" (On-Going).
6. "Comparison of 3 techniques to determine body composition in athletes" (On-Going).

Teaching Experience

Courses Taught

2022

Semester	Course Prefix & Number	Course Name	Section #	Enrollment
Spring	KIN 3515	PHYS BAS PHYSCL ACTV	003	43
Spring	KIN 7535	NEUROMUS ASPCTS EXER	001	8
Summer-B	KIN 3515	PHYS BAS PHYSCL ACTV	002	31

2021

Semester	Course Prefix & Number	Course Name	Section #	Enrollment
Fall	KIN 3515	PHYS BAS PHYSCL ACTV	003	45
Fall	KIN 7530	EXERCISE PHYSIOLOGY	001	4
Fall	KIN 8900	INDEPENDENT RESEARCH	003	2
Spring	KIN 3515	PHYS BAS PHYSCL ACTV	003	42
Spring	KIN 7546	EXERCISE METABOLISM	001	7
Spring	KIN 8000	THESIS RESEARCH	005	1

2020

Semester	Course Prefix & Number	Course Name	Section #	Enrollment
Fall	KIN 3515	PHYS BAS PHYSCL ACTV	003	45
Fall	KIN 4900	INDEPENDENT STUDY	009	1
Fall	KIN 7503	DIMENSIONS OF AGING	001	14
Fall	KIN 8000	THESIS RESEARCH	005	1
Fall	KIN 8900	INDEPENDENT RESEARCH	003	2

Spring	KIN 3515	PHYS BAS PHYSCL ACTV	002	45
Spring	KIN 4900	INDEPENDENT STUDY	007	3
Spring	KIN 7550	EXERCISE PHYSIOLOGY	001	10
Spring	KIN 8000	THESIS RESEARCH	005	1
Spring	KIN 8900	INDEPENDENT RESEARCH	005	3

2019

Semester	Course Prefix & Number	Course Name	Section #	Enrollment
Fall	KIN 3515	PHYS BAS PHYSCL ACTV	002	47
Fall	KIN 3515	PHYS BAS PHYSCL ACTV	003	43
Fall	KIN 4900	INDEPENDENT STUDY	008	2
Fall	KIN 8900	INDEPENDENT RESEARCH	006	2
Spring	KIN 3515	PHYS BAS PHYSCL ACTV	001	39
Spring	KIN 3515	PHYS BAS PHYSCL ACTV	002	39
Spring	KIN 4900	INDEPENDENT STUDY	008	3
Spring	KIN 8900	INDEPENDENT RESEARCH	006	2

2018

Semester	Course Prefix & Number	Course Name	Section #	Enrollment
Fall	KIN 3515	PHYS BAS PHYSCL ACTV	001	55
Fall	KIN 4900	INDEPENDENT STUDY	010	3
Fall	KIN 7503	DIMENSIONS OF AGING	001	15
Spring	KIN 3515	PHYS BAS PHYSCL ACTV	001	50
Spring	KIN 7546	EXERCISE METABOLISM	001	12

2017

Semester	Course Prefix & Number	Course Name	Section #	Enrollment
Fall	KIN 3515	PHYS BAS PHYSCL ACTV	001	46
Fall	KIN 3515	PHYS BAS PHYSCL ACTV	002	46
2nd Summer	KIN 3515	PHYS BAS PHYSCL ACTV	1	27
Spring	KIN 3515	PHYS BAS PHYSCL ACTV	2	39
Spring	KIN 4900	INDEPENDENT STUDY	9	1
Spring	KIN 7503	DIMENSIONS OF AGING	1	4

2016

Semester	Course Prefix & Number	Course Name	Section #	Enrollment
Fall	KIN 3515	PHYS BAS PHYSCL ACTV	1	47
Fall	KIN 7534	EXERC IN HLTH & DIS	1	5
Spring	KIN 7503	DIMENSIONS OF AGING	1	8

Directed Student Learning

Completed

42. Master's Non-Thesis Committee Member. Advised: Logan Bueche. (2021)
41. Master's Non-Thesis Committee Member. Advised: Dustin Ducree. (2021)
40. Dissertation Committee Member, "A Wearable Pulse Oximeter with Wireless Communication and Motion Artifact Tailoring for Continuous Use," School of Electrical Engineering and Computer Science. Advised: Pedro Chacon Dominguez. (2021)
39. Dissertation Committee Member, "Exercise and Bone: Older Adults, Type II Diabetes, and Ketogenic Diets," School of Kinesiology. Advised: Matthew Scott. (2021)
38. Master's Thesis Committee Chair, "Establishing And Validating Methods To Assess The Influence Of Exercise On Circulating Exosome Profiles In Sedentary Older Adults School of Kinesiology," Advised: Heather Quiariarte. (2021)
37. Master's Non-Thesis Committee Member. Advised: Dexter Turner. (2021)
36. Master's Non-Thesis Committee Member. Advised: Samantha. (2021)
35. Master's Non-Thesis Committee Member. Advised: Keet Dailey. (2020)
34. Dissertation Committee Member, "Eye-hand Coordination Varies According to Changes in Cognitive-Motor Load and Eye Movements Used," School of Kinesiology. Advised: Matthew Yeomans. (2020)
33. Master's Thesis Committee Member, "The Effects Watermelon Juice Supplementation on Postprandial Vascular Endothelial Function and Blood Flow During Hyperglycemia," School of Kinesiology. Advised: Cullen Vincelle. (2020)
32. Dean's Representative on Dissertation Defense Committee, "The Association Between Autism Spectrum Disorder and Parental Age," Psychology. Advised: Claire Burns. (2020)
31. Dissertation Committee Member, "Nutraceuticals & Resistance Exercise Training: Effects On Rate Pressure Product An Index Of Myocardial Oxygen Consumption," School of Kinesiology. Advised: Junhai Xu. (2020)
30. Dissertation Committee Member, "The Exercise Performance in the Heat and the Cooling Interventions of Hyperthermia and Cardiovascular Stress," School of Kinesiology. Advised: Haoyan Wang. (2020)
29. Master's Non-Thesis Committee Member, School of Kinesiology. Advised: Hugh Ngo. (2020)
28. Master's Non-Thesis Committee Member, School of Kinesiology. Advised: Adam Morales. (2020)
27. Master's Thesis Committee Member, "Impact Of Psychological And Physical Stressors On The Exercise Induced Immune Response In Collegiate Swimmers," School of Kinesiology. Advised: Connor Kuremsky. (2019)
26. Doctoral Advisory Committee Member, "Examining Successful Aging and Resilience after Disaster," Psychology. Advised: Katie Stanko. (2019)
25. Master's Non-Thesis Advisor, School of Kinesiology. Advised: Carlante Emerson. (2019)

24. Master's Non-Thesis Advisor. Advised: Peter Currier. (2019)
23. Doctoral Advisory Committee Member, "Chronic Nucleoside Reverse Transcriptase Inhibitors Disrupt Mitochondrial Homeostasis And Promote Premature Endothelial Senescence," Veterinary Sciences. Advised: Yi-Fan Chen. (2019)
22. Undergraduate Honors Thesis Committee Member, "Links between Physical Activity Levels and Parkinson's Disease Medication Ingestion Time: A Case Study," School of Kinesiology. Advised: Thea Fontenot. (2018)
21. Master's Non-Thesis Committee Member, School of Kinesiology. Advised: Jacob Thornberry. (2018)
20. Master's Non-Thesis Committee Member, School of Kinesiology. Advised: Elizabeth Selden. (2018)
19. Dean's Representative on Dissertation Defense Committee, "5-Lipoxygenase (5-LOX)-5-Lipoxygenase Activating Protein (FLAP)-Nanodisc Complex: A Model for the 5-LOX-FLAP Interaction," Biological Sciences. Advised: Erin Schexnaydre. (2018)
18. Dean's Representative on Dissertation Defense Committee, "Faculty and Staff Knowledge and Perceptions of African American College Students with Bipolar Disorder Experiences While Attending a Predominantly White Institution." Advised: Tiffany Zachery. (2017)
17. Master's Non-Thesis Committee Member. Advised: Erin Greenblatt. (2017)
16. Master's Non-Thesis Committee Member. Advised: Jerrica Steward. (2017)
15. Master's Non-Thesis Committee Member. Advised: Jordan Hagstette. (2017)
14. Master's Non-Thesis Committee Member. Advised: Mindee Haydal. (2017)
13. MITOEAGLE Mentor, "The effects of a Mediterranean versus Western diet on nonhuman primate skeletal muscle bioenergetics." Advised: Jennifer Collins. (2017)
12. Dissertation Defense Committee Member, The Immediate and Extended Effect of Diet and Exercise on Metabolic Flexibility. Advised: Timothy Allerton. (2017)
11. Master's Thesis Committee Member. Advised: Adam Lowe. (2017)
10. Directed Individual/Independent Study. Advised: Anthony Connell. (2017)
9. Master's Thesis Committee Member, Psychology. Advised: Katie Stanko.(2016)
8. Master's Non-Thesis Committee Member. Advised: Daniel Ragus.(2016)
7. Master's Non-Thesis Committee Member. Advised: Traci Haugen.(2016)
6. Dean's Representative on Dissertation Defense Committee. Advised: Teresa De Leon.(2016)
5. Master's Thesis, Ex Officio Member (Dr. Rovnyak, Chair), "NMR Spectroscopy-based Characterization of Human Serum." Advised: Matthew Miele. (2014)
4. Master's Thesis Committee Member, "Lifestyle and Metabolic Predictors of Weight Regain following RYGB," Kinesiology. Advised: Joshua Fleming
3. Internship Advisor, "Body composition assessment in Bariatric Patients," Kinesiology. Advised: Meghan Fetterman. (2013)

2. Master's Thesis, Ex Efficio Member (Dr. Rovnyak, Chair), "NMR Spectroscopy-based Metabolomics and Type 2 Diabetes," Chemistry. Advised: Broc Wenrich (2013)
1. Summer Undergraduate Research Fellow Supervisor, "The effect of modality on mixed muscle protein synthesis in young and elderly adults." Advised: Yiquan Sun. (2011)

In-Process

13. Doctoral Advisory Committee Member, School of Kinesiology. Advised: Nolynn Sutherland
12. Doctoral Advisory Committee Member, School of Kinesiology. Advised: Jason Soileau
11. Master's Non-Thesis Committee Member. Advised: Hannah Johnson
10. Master's Non-Thesis Committee Member. Advised: Caitlyn Collins
9. Doctoral Advisory Committee Member, School of Kinesiology. Advised: Matthew Martone
8. Doctoral Advisory Committee Member, School of Kinesiology. Advised: Josh Granger
7. Doctoral Advisory Committee Member, School of Kinesiology. Advised: Gregory Reeves
6. Doctoral Advisory Committee Chair, School of Kinesiology. Advised: Brett Davis
5. Doctoral Advisory Committee Chair, School of Kinesiology. Advised: James Stampely
4. Doctoral Advisory Committee Chair, School of Kinesiology. Advised: Gregor M. Davis
3. Doctoral Advisory Committee Chair, School of Kinesiology. Advised: Carlante Emerson
2. Doctoral Advisory Committee Member. Advised: Bailey Theall
1. Doctoral Advisory Committee Member, School of Kinesiology. Advised: Elizabeth Heintz

Non-Credit Instruction Taught

12. Guest Lecture, BIOL 7800 Bioenergetics, Louisiana State University. (April 2018).
11. Guest Lecture, Kinesiology 567: Advanced Exercise Physiology, Penn State University. (2015).
10. Guest Lecture, Kinesiology 455: Physiological Basis for Exercise as Medicine, Penn State University. (2015).
9. Guest Lecture, Kinesiology 567: Advanced Exercise Physiology, Penn State University. (2014).
8. Guest Lecture, Kinesiology 567: Advanced Exercise Physiology, Penn State University. (2013).
7. Guest Lecture, EXRSCI556: Muscular Adaptations, Bloomsburg University. (2012).
6. Guest Lecture, CORE 6700: Integrative Physiology, Mayo Clinic. (2011).
5. Guest Lecture, CORE 6700: Integrative Physiology, Mayo Clinic. (2010).
4. Guest Lecture, CORE 6700: Integrative Physiology, Mayo Clinic. (2009).
3. Group Leader, CTSA Introduction to Clinical & Transnational Research, Mayo Clinic. (2009).

2. Guest Lecture, CORE 6700: Integrative Physiology, Mayo Clinic. (2008).
1. Guest Lecture, CORE 6700: Integrative Physiology, Mayo Clinic. (2007).

Teaching Innovation and Curriculum Development

Other

1. New Course Preparation. KIN3515. August 2016 - December 2016.
Prepared course for the first time. Incorporated Turning Point Clickers for the first time.

Revised Existing Course

3. Revised Existing Course. KIN7546. January 2018 - May 2018.
Revised Exercise Metabolism course to include a combination of summary lectures, primary article critiques, and class project. This course had not been taught in several years prior to Spring 2018.
2. Revised Existing Course. KNIN7503. January 2016 - April 2016.
Revised course to provide a multi-disciplinary survey style overview of important topics related to the dimension of aging consistent with the Life Course on Aging graduate certification. This includes using publicly available data (e.g., NHANES) to address the impact of aging on health a disease. These projects work in collaboration with the National Institute of Aging and one class project is being revised for submission to a peer reviewed journal.
1. Revised Existing Course. KIN7534. August 2015 - December 2015.
Revised Exercise Health and Disease course to include a combination of summary lectures, primary article critiques, and class project.

Faculty Development Activities Attended

20. Workshop, "IOC153 – NextGen-O2k All-in-one Demo". Innsbruck Austria. (July 1-2, 2022).
19. Workshop, "Isotope Tracers in Metabolic Research: Principles and Practice of Kinetic Analysis," National Institutes of Health/Vanderbilt University (Virtual). (2021).
18. Symposium, "2018 Barshop Symposium on Aging "Exercise Regulation of Biological Aging", San Antonio, TX. (October 2018).
17. Certification, "Personalized Blood Flow Restriction Rehabilitation," Owens Recovery Science, San Antonio, TX. (September 2018).
16. Audit, "BIO7800 (Bioenergetics)," Louisiana State University, Baton Rouge. (January 2018 - May 2018).
15. Workshop, "MitoFit Science Camp," Mitochondrial Physiology Society, Austria. (2016).
14. Workshop, "Oroboros Oxygraph 2k Fluorometry Training Workshop," Oroboros, Austria. (2013).
13. Workshop, "Oroboros Oxygraph 2k High-Resolution Respirometry Training Workshop," Oroboros, Austria. (2012).
12. Workshop, "Isotope Tracers in Metabolic Research: Principles and Practice of Kinetic Analysis," National Institutes of Health, Little Rock, AR. (2010).
11. Conference Attendance, "Annual Meeting for ACRT/CTSA (NIH)," National Institutes of Health, Washington, DC. (2009).

10. Conference Attendance, "Annual Midwest Consortium Meeting (Mayo Clinic)," National Institutes of Health, Rochester, MN. (2008).
9. Professional Meeting Attendance, "Annual Meeting for CTSA KL2, K12, and K30 Scholars (NIH)," National Institute of Health, Washington, DC. (2008).
8. Workshop, "Biomedical Publications Workshop by David Morrison (Mayo Clinic)," Mayo Clinic, Rochester. (2008).
7. Workshop, "Leadership Principles in the 21st Century (Mayo Clinic)," Mayo Clinic, Rochester. (2008).
6. Workshop, "Mitochondrial Molecular Biology and Pathology Workshop (NIH)," National Institutes of Health, Bethesda, MD. (2008).
5. Workshop, "NIH Mock Study Section," National Institute of Health, Washington, DC. (2008).
4. Workshop, "Presentation Skills Workshop (Mayo Clinic)," Mayo Clinic, Rochester, MN. (2008).
3. Workshop, "NIH Grant Writing Workshop by David Morrison (Mayo Clinic)," Mayo Clinic, Rochester. (2006).
2. Seminar, "University of Virginia's August Teaching Seminar," University of Virginia, Charlottesville, VA. (2002).
1. Workshop, "University of Miami's Leadership Summit," University of Miami, Coral Gables, FL. (1998).

University, College, Or Department Service

Committee Member (Alternate), LSU Institutional Review Board. (August 2020-Present).

Committee Chair, Assistant Professor of Exercise Physiology Search Committee. (August 2019-Present).

Attendee, Huey P Long Field House Renovation. (2019 - Present).

Co-Director of the DXA Laboratory. (2017 - Present).

Committee Member, LSU Life Course on Aging (LCAC). (September 2015 - Present).

Member, School of Kinesiology Strategic Plan: Research and Discovery Working Group. (2018).

LSU ORED Summer Stipend Program. (November 2017 - December 2017).

Motor Behavior Search Committee. (November 1, 2016 - February 15, 2017).

Professional Service

Committee Member

Committee Member, American College of Sports Medicine, Aging Interest Group (2021-2024)

Committee Member, Data Safety Monitoring Board (DSMB), OPSII Study. (August 1, 2019 - 2022).

Committee Member, Mitochondrial mapping: Evolution - Age - Gender - Lifestyle – Environment (MitoEAGLE) Consortium. (July 2016 - Present).

Committee Member, Data Safety Monitoring Board (DSMB), Physiological and psychological effects of testosterone during severe energy deficit and recovery: a randomized, placebo controlled trial. (January 1, 2016 - December 31, 2017).

Member

Member, Mayo Clinic Center for Translational Sciences Activities, Rochester, MN. (2008 - 2012).

Other

Protocol Reviewer, Mayo Clinic Endocrine Research Unit. (2006 - 2012).

Reviewer, Grant Proposal

Reviewer, Grant Proposal, Department of Defense. (2020).

Reviewer, Grant Proposal, Department of Defense. (2019).

Reviewer, Grant Proposal, Department of Defense. (June 2018).

Reviewer, Grant Proposal, Mayo Clinic's NIH Regional Metabolomics Core Pilot and Feasibility Grants, Rochester, MN. (April 2018).

Reviewer, Grant Proposal, Mayo Clinic's NIH Regional Metabolomics Core Pilot and Feasibility Grants. (May 2017).

Reviewer, Grant Proposal, Department of Defense. (December 2016).

Reviewer, Grant Proposal, Mayo Clinic's NIH Regional Metabolomics Core Pilot and Feasibility Grants. (May 2016).

Reviewer, Grant Proposal, 2012 Diabetes Research Center Pilot and Feasibility Grant Award. (May 2012).

Reviewer, Grant Proposal, Albert Einstein's Diabetes Research and Training Center. (2010).

Reviewer, Grant Proposal, Jeffress Memorial Trust Grant. (2008).

Reviewer, Abstracts for Scientific Meetings

Reviewer, American College of Sports Medicine. (2021).

Reviewer, American College of Sports Medicine. (2020)

Reviewer, Journal

Age and Ageing

American Journal of Clinical Nutrition

American Journal of Physiology: Endocrinology and Metabolism

American Journal of Physiology: Regulatory, Integrative and Comparative Physiology

Analytical Biochemistry

BBA Bioenergetics

Clinical Diabetes

Diabetes

Diabetes Care

Diabetic Medicine

Endocrinology

European Journal of Applied Physiology

JAMDA

Journal of Applied Physiology

Journal of Clinical Endocrinology and Metabolism

Journal of Nutrition

Journal of Sport Rehabilitation

Nutrition Journal

Physiological Reports

PLoSOne

Obesity

PeerJ

Session Chair

Session Chair, Bioblast 2022: BEC Inaugural Conference, Methodological Advancements in Bioenergetics, Innsbruck, Austria. (June 29-30, 2022).

Session Chair, ACSM 2022 Annual Meeting and World Congresses, Hot Topics in Skeletal Muscle Mitochondrial Health, San Diego, CA. (May 31-June 4, 2022).

Session Chair, MitoFit Science Camp 2016, Cells and Tissue Session, Kuehtai. (July 9, 2016).

Session Chair, SEACSM Annual Meeting, Acute vs Chronic Exercise induced Improvements in Cardiometabolic Health, Greenville, SC. (February 19, 2016).

Session Chair, Obesity Week, Adaptive Thermogenesis and Overfeeding. (November 3, 2011).