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University of Virginia
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Department of Kinesiology
Professor of Exercise Physiology
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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 Major: Biochemistry	Coral Gables, FL

Current Academic Rank and Position

2026-Present	Professor, University of Virginia, Department of Kinesiology of Kinesiology
2026-Present	Affiliate, Robert M. Berne Cardiovascular Research Center, University of Virginia School of Medicine
2026-Present	<i>Gratis</i> Professor, Louisiana State University, School of Kinesiology
2019-Present	Adjunct Faculty, Pennington Biomedical Research Center

Previous Professional Positions and Major Appointments

2024-2026	Professor (Tenured), Louisiana State University, School of Kinesiology
2025-2026	Chair of the Tenured Faculty Committee Louisiana State University, School of Kinesiology.
July 2025	Visiting Scientist – Oroboros Instruments
2019-2024	Associate Professor, Louisiana State University, School of Kinesiology.
2015-2019	Adjunct Assistant Professor, Pennington Biomedical Research Center
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.

- 2001-2005 NIH Complementary and Alternative Medicine Predoctoral Fellow, University of Virginia.
- 2000-2001 Research Assistant, Oregon Health Science University, Division of Health Promotion & Sports Medicine.

Certification

- 2024-2029 Certified Clinical Densitometrist (CCD), International Society for Clinical Densitometry (#20829)

Awards and Honors

- 2024 LSU CHSE Distinguished Research Award
- 2024 Sigma Xi, The Scientific Research Honor Society
- 2024 Inaugural Meauxmentum Scholar, Louisiana Board of Regents
- 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 (Extended Board Member 2024-Present)
- 2010-Present American Physiological Society
- 2006-2014 American Diabetes Association
- 2004-2015 Endocrine Society
- 2003-2015 Obesity Society
- 2002-Present American College of Sports Medicine

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

96. Schoeberlein MI, Hunter LD, Richardson EW, **Irving BA**, Wilkins BW. Near infrared spectroscopy-derived muscle oxidative capacity correlates to oxidative metabolic predictors of performance in highly trained female middle-distance runners. *Physiol Rep.* 2026 Aug;14(15):e71047. doi: 10.14814/phy2.71047. PMID: 42572413; PMCID: PMC13454737.
95. Keller JL, Pennartz KJ, Sprick JD, Hein EJ, **Irving BA**, Vann CG, Butlig ER, Al-Masri S, Nelson AR. A peripheral perspective on brain health: vascular and skeletal muscle contributions. *Am J Physiol Heart Circ Physiol.* 2026 Aug 7. doi: 10.1152/ajpheart.00462.2026. Epub ahead of print. PMID: 42565788.

94. Benotti PN, Wood GC, **Irving BA**, Ricciardi BF, Schwarzkopf R, Parikh MS, Browne JA, Seiler JL, Samuels J, Still CD; SWIFT Writing Committee. Impact of Prior Bariatric Surgery Versus Immediate Total Knee Arthroplasty on Knee Function Among Patients Who Have Severe Obesity and Advanced Knee Osteoarthritis: The SWIFT Trial. *J Arthroplasty*. 2026 May 24:S0883-5403(26)00549-8. doi: 10.1016/j.arth.2026.05.033. Epub ahead of print. PMID: 42184930.
93. Martone M, **Irving BA**, Spielmann G, Johannsen NM, Robinson MM, Chancellor JC, Allaway HCM. Low-dose simulated galactic cosmic radiation exposure after hindlimb unloading has long-term impact on skeletal muscle metabolic proteins in female mice. *Am J Physiol Regul Integr Comp Physiol*. 2026 Jun 1;330(6):R582-R589. doi: 10.1152/ajpregu.00014.2026. Epub 2026 Apr 30. PMID: 42059871.
92. Brandhurst G, Piedy E, Etheredge S, Martone M, Quiriarte HD, Phillips P 4th, Calvert D, Lemoine NP Jr, Marucci J, **Irving BA**, Zura R, Spielmann G, Johannsen NM, Matthews R. Characterizing Biomarkers of Muscle Damage in Collegiate Football Players: A Prospective, Repeated Measures Study. *J Clin Med*. 2026 Mar 25;15(7):2502. doi: 10.3390/jcm15072502. PMID: 41976803; PMCID: PMC13073919.
91. Papadopoulos E, **Irving BA**, Allaway HCM, Spielmann G, Lin M, Finan KR. The association between radiographic osteosarcopenia and overall mortality among older patients undergoing colorectal cancer resection. *Aging Clin Exp Res*. 2026. doi: 10.1007/s40520-026-03372-w
90. Brieske SD, **Irving BA**, Rees BB. The Contribution of Tissue-Specific Mitochondrial Respiration to Individual Variation in Oxygen Uptake during Rest and Exercise by the Gulf Killifish, *Fundulus grandis*. *Ecol Evol Physiol*. 2025 Jul-Aug;98(4):244-259. doi: 10.1086/737167. Epub 2025 Jul 31. PMID: 41105886.
89. Papadopoulos E, **Irving BA**, Brown JC, Heymsfield SB, Sattar S, Alibhai SMH, Williams GR, Dunne RF. Sarcopenia and Cachexia in Older Patients with Cancer: Pathophysiology, Diagnosis, Impact on Outcomes, and Management Strategies. *Drugs Aging*. 2025 Oct 8. doi: 10.1007/s40266-025-01252-y. Epub ahead of print. PMID: 41060616.
88. Emerson C, Kim HK, **Irving BA**, Papadopoulos E. Reliability and Inter-Device Agreement Between a Portable Handheld Ultrasound Scanner and a Conventional Ultrasound System for Assessing the Thickness of the Rectus Femoris and Vastus Intermedius. *J Funct Morphol Kinesiol*. 2025 Aug 1;10(3):299. doi: 10.3390/jfmk10030299. PMID: 40843830.
87. Cho E, Spielmann G, **Irving BA**[#]. Effects of lactate concentration on T-cell phenotype and mitochondrial respiration. *Physiol Rep*. 2025 Jul;13(14):e70450. doi: 10.14814/phy2.70450. PMID: 40705846; PMCID: PMC12288854.
86. Davis BH, Spielmann G, Johannsen NM, Fairchild V, Allerton TD, **Irving BA**[#]. Effect of training status on muscle excitation and neuromuscular fatigue with resistance exercise with and without blood flow restriction in young men. *Physiol Rep*. 2025 Mar;13(6):e70274. doi: 10.14814/phy2.70274. PMID: 40110914; PMCID: PMC11923869.
85. Quiriarte H, Cho E, Kim Y, Doiron JE, Davis G, Stampley J, Noland RC, Li Z, Shah SJ, **Irving BA**, Spielmann G, Lefer DJ, Allerton TD. Impact of Voluntary Exercise on Systemic Inflammation in a 2-Hit Model Heart Failure With Preserved Ejection J Am Heart Assoc. 2025 Mar 4;14(5):e10753. doi: 10.1161/JAHA.124.035028. PMID: 40028883; PMCID: PMC12132602.
84. Quiriarte H, Noland RC, Stampley JE, Davis G, Li Z, Cho E, Kim Y, Doiron J, Spielmann G, Ghosh S, Shah SJ, **Irving BA**, Lefer DJ, Allerton TD. Exercise Therapy Rescues Skeletal Muscle Dysfunction and Exercise Intolerance in Cardiometabolic HFpEF. *JACC: Basic to Translational Science*. 2024;9(12):1409-25.
83. Allerton TD, Stampley JE, Li Z, Yu X, Quiriarte H, Doiron JE, White G, Wigger Z, Gartia MR, Lefer DJ, Soto P, **Irving BA**. Nitric oxide donors rescue metabolic and mitochondrial dysfunction in obese Alzheimer's model. *Sci Rep*. 2024 Oct 30;14(1):26118. doi: 10.1038/s41598-024-75870-8. PMID: 39478095; PMCID: PMC11525932.

82. Davis BH, Stampley JE, Granger J, Scott MC, Allerton TD, Johannsen NM, Spielmann G, **Irving BA**[#]. Impact of low-load resistance exercise with and without blood flow restriction on muscle strength, endurance, and oxidative capacity: A pilot study. *Physiol Rep*. 2024 Jun;12(12):e16041. doi: 10.14814/phy2.16041. PMID: 38888154; PMCID: PMC11184470.
81. **Irving BA** and Kunz HE. **Commentary:** Unraveling the Roles of Ectopic Adipose Depots and Physical Activity in Age-related Mitochondrial Decline. *Obesity (Silver Spring)*. 2024 Jun;32(6):1043-1044. doi: 10.1002/oby.24048. PMID: 38803313.
80. Wang Z, **Irving BA**, Spielmann G, Johannsen N, Greenway F, Dalecki M. A single exposure to 100% normo-baric oxygen therapy appears to improve sequence learning processes by increasing prefrontal cortex oxygen saturation. *Brain Res*. 2024 Aug 15;1837:148962. doi: 10.1016/j.brainres.2024.148962. Epub 2024 Apr 25. PMID: 38670479.
79. Cho E, Granger J, Theall B, Lemoine N, Calvert D, Marucci J, Mullenix S, O'Neal H, Jacome T, **Irving BA**, Johannsen NM, Carmichael O, Spielmann G. Blood and MRI biomarkers of mild traumatic brain injury in non-concussed collegiate football players. *Sci Rep*. 2024 Jan 5;14(1):665. doi: 10.1038/s41598-023-51067-3. PMID: 38182718; PMCID: PMC10770029.
78. Wang Z, Spielmann G, Johannsen N, Greenway F, **Irving BA**, Dalecki M. A simple 100% normobaric oxygen treatment can substantially enhance sequence learning processes. *Behav Brain Res*. 2023 Oct 18;455:114658. doi: 10.1016/j.bbr.2023.114658. Epub 2023 Sep 9. PMID: 37690702.
77. Cho E, Stampley J, Wall R, Matthews R, Zunica E, Brown JC, Johannsen NM, **Irving BA**, Spielmann G. Acute Exercise Increases NK Cell Mitochondrial Respiration and Cytotoxicity against Triple Negative Breast Cancer Cells under Hypoxic Conditions. *Med Sci Sports Exerc*. 2023 Jul 5. doi: 10.1249/MSS.0000000000003250. Epub ahead of print. PMID: 37436930.
76. Wang Z, Spielmann G, Johannsen N, Greenway F, **Irving BA**, Dalecki M. Boost your brain: a simple 100% normobaric oxygen treatment improves human motor learning processes. *Front Neurosci*. 2023 Jul 11;17:1175649. doi: 10.3389/fnins.2023.1175649. PMID: 37496738; PMCID: PMC10366362.
75. Wang H, Theall BM, Early KS, Vincellette C, Robelot L, Sharp RL, Marucci J, Mullenix S, Calvert D, Lemoine NP Jr, **Irving BA**, Spielmann G, Johannsen NM. Seasonal changes in physiological and psychological parameters of stress in collegiate swimmers. *Sci Rep*. 2023 Jul 7;13(1):10995. doi: 10.1038/s41598-023-37124-x. PMID: 37419893; PMCID: PMC10328912.
74. Stampley JE, Cho E, Wang H, Theall B, Johannsen NM, Spielmann G, **Irving BA**[#]. Impact of maximal exercise on immune cell mobilization and bioenergetics. *Physiol Rep*. 2023 Jun;11(11):e15753. doi: 10.14814/phy2.15753. PMID: 37312242; PMCID: PMC10264558.
73. Matthews R, Early KS, Vincellette CM, Lusso J, Spielmann G, **Irving BA**, Allerton TD. The Effect of Watermelon Juice Supplementation on Heart Rate Variability and Metabolic Response during an Oral Glucose Challenge: A Randomized, Double-Blind, Placebo-Controlled Crossover Trial. *Nutrients*. 2023 Feb 4;15(4):810. doi: 10.3390/nu15040810. PMID: 36839167; PMCID: PMC9967111.
72. McCarthy C, Tinsley GM, Yang S, **Irving BA**, Wong MC, Bennett JP, Shepherd JA, Heymsfield SB. Smartphone prediction of skeletal muscle mass: model development and validation in adults. *Am J Clin Nutr*. 2023 Apr;117(4):794-801. doi: 10.1016/j.ajcnut.2023.02.003. Epub 2023 Feb 8. PMID: 36822238; PMCID: PMC10315403.
71. Wong MC, Bennett JP, Leong LT, Tian IY, Liu YE, Kelly NN, McCarthy C, Wong JMW, Ebbeling CB, Ludwig DS, **Irving BA**, Scott MC, Stampley J, Davis B, Johannsen N, Matthews R, Vincellette C, Garber AK, Maskarinec G, Weiss E, Rood J, Varanoske AN, Pasiakos SM, Heymsfield SB, Shepherd JA. Monitoring body composition change for intervention studies with advancing 3D optical imaging technology in comparison to dual-energy X-ray absorptiometry. *Am J Clin Nutr*. 2023 Apr;117(4):802-813. doi: 10.1016/j.ajcnut.2023.02.006. Epub 2023 Feb 14. PMID: 36796647; PMCID: PMC10315406.

70. Rees BB, Reemeyer JE, **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. PMID: 35673886.
69. Granger J, Cho E, Lindsey K, Lemoine N, Calvert D, Marucci J, Mullenix S, O'Neal H, **Irving BA**, Johannsen N, Spielmann G. 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. PMID: 35641582; 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. PMID: 34901131; PMCID: PMC8661498.
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. PMID: 34889067; PMCID: PMC8661513.
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. PMID: 34627389; PMCID: PMC8502397.
65. Vincellette CM, Losso J, 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. doi: 10.1093/jn/nxab279. PMID: 34510203; PMCID: PMC8562079.
64. Cho E, Theall B, Stampley J, Granger J, Johannsen NM, **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 Aug 3;13(8):1535. doi: 10.3390/v13081535. PMID: 34452400; PMCID: PMC8402764.
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 Apr;9(8):e14826. doi: 10.14814/phy2.14826. PMID: 33945230; PMCID: PMC8095363.
62. Davis B, Liu YH, 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)*. 2021 Apr 15;6(2):41. doi: 10.3390/geriatrics6020041. PMID: 33920900; PMCID: PMC8167721.
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 sickle cell trait have altered hematological responses and hydration status. *Sci Rep*. 2021 Jan 19;11(1):1844. doi: 10.1038/s41598-021-81473-4. PMID: 33469159; PMCID: PMC7815921.
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 Apr 1;53(4):712-723. doi: 10.1249/MSS.0000000000002516. Erratum in: *Med Sci Sports Exerc*. 2021 Dec 1;53(12):2703. PMID: 33105388; PMCID: PMC9045727.
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 Jan 1;128(1):178-188. doi: 10.1152/jappphysiol.00646.2019. Epub 2019 Nov 27. PMID: 31774356.

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.
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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.
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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.
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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).
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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.
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resistance. *Mayo Clin Proc.* 2012 Jun;87(6):561-70. doi: 10.1016/j.mayocp.2012.02.014. Erratum in: *Mayo Clin Proc.* 2013 Aug;88(8):903-4. PMID: 22677076; PMCID: PMC3497591

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Book Chapters

1. Kunz HE, **Irving BA**, Karl JP, and Quiriarte H. (2024). Systems Immunity and Exercise, in *Exercise Immunology Second Edition*-James Turner, Guillaume Spielmann, John Campbell, eds.

Other Publications / Pre-Prints

4. Chicco AJ, Zilhaver PT, Whitcomb LA, Fresa KJ, Izon CS, Gonzalez Franquesa A, Dometita C, **Irving BA**, Garcia-Roves PM (2022) Resolving the Rotenone Paradox: elucidating the complexity of multi-substrate respirometry protocols. MitoFit Preprints 2022.17. <https://doi.org/10.26124/mitofit :2022-0017>.
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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. The 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

27. Papadopoulos E. (Author & Presenter), Loh K.P. (Author), Spielmann G. (Author), **Irving B.A.** (Author), Finan K. "Correlations between computed tomography-derived skeletal muscle characteristics and routine blood markers among patients awaiting colorectal cancer surgery". International Conference on Frailty and Sarcopenia Research (ICFSR), Washington DC, Mar 10-12, 2026 (**Rapid Oral**).
26. Papadopoulos E. (Author & Presenter), **Irving B.A.** (Author), Allaway H. (Author), Spielmann G. (Author), Lin MingDe. (Author), Finan K (Author). "Role of osteosarcopenia in predicting overall mortality among older adults with cancer undergoing colorectal cancer resection". Sarcopenia Cachexia Wasting Disorders (SCWD) Annual Meeting. Rome, Italy, Dec 11-13, 2025 (**Poster**).
25. Papadopoulos E. (Author & Presenter), Loh K.P. (Author), Spielmann G. (Author), **Irving B.A.** (Author), Finan K (Author). Correlations between computed tomography-derived skeletal muscle characteristics and routine blood markers among patients awaiting colorectal cancer surgery". International Conference on Frailty and Sarcopenia Research (ICFSR), Washington DC, Mar 10-12, 2026 (**Poster**)
24. Cho E (Author & Presenter), Spielman G (Author), **Irving BA** (Author). "Effects of lactate concentration on T-cell phenotype and mitochondrial respiration". 2025 Mitochondrial Physiology Society Summer School. Baton Rouge, LA. May 2025 (**Poster**).
23. Sivasailam A (Author & Presenter) and **Irving BA** (Author). "Proof-of-Concept: Standardization of NADH Measurements Using High-Resolution Respirometry in Isolated Mitochondria from C2C12 Myotubes to Study Autophagy Modulation Effects on NADH Redox Balance". 2025 Mitochondrial Physiology Society Summer School. Baton Rouge, LA. May 2025 (**Poster**).
22. Brieske S (Author & Presenter), Irving BA (Author), Rees B (Author). "The contribution of tissue-specific mitochondrial respiration to individual variation in oxygen uptake during rest and exercise by the Gulf killifish, *Fundulus grandis*". 2025 Mitochondrial Physiology Society Summer School. Baton Rouge, LA. May 2025 (**Oral**)
21. Rees B (Author & Presenter), Reemyer J (Author), **Irving BA** (Author). "Inter-Individual Variation in Aerobic Metabolism Varies with Gill Morphology and Heart Mitochondrial Metabolism," Society of Experimental Biology Annual Conference. Montpellier, France. (July 2022) (**Oral**)
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). (**Oral**)
19. **Irving BA** (Author & Presenter), Stampely J (Author), Quiriarte 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) (**Oral**)
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) (**Oral**)
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), Grefte S, **Irving BA** (Author), Moreno S (Author), Ost M (Author), Pesta D (Author). 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). **(Oral)**
15. **Irving BA**. MitoEAGLE Working Group Workshop (WG1-4), "PBMC and T-Cell Mitochondrial Function in Humans: LSU Update," Obergurgl, Austria. (July 27, 2017). **(Oral)**
14. **Irving BA**. MitoFit Science Camp 2016, "The Shredder: Lessons Learned," MitoEAGLE Consortium, Kuehtai, Austria. (July 11, 2016). **(Oral)**
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). **(Oral)**
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). **(Oral)**
9. **Irving BA** (Author & Presenter). Oroboros O2K Fluorimetry Workshop, "Shredder Applications in High-Resolution Respirometry," Oburgurgl, Austria. (September 19, 2013). **(Oral)**
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). **(Oral)**
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). **(Oral)**
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). **(Oral)**
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). **(Poster)**

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). **(Poster)**

National

95. Pandit A (Author & Presenter), **Irving B** (Author), Francis J (Author), Lefer D (Author), Allerton A (Author). Voluntary Exercise Training Attenuates Cardiac Hypertrophy Transcriptional Pathways in HFpEF in the Absence of Improvements in Cardiac Metabolism. American Heart Association's Basic Cardiovascular Sciences Scientific Sessions 2025: Advances in Cardiovascular Science: From Discovery to Translation **(Poster)** New Orleans, Nov 7-10, 2025.
94. Emerson C (Author & Presenter), Kim H (Author), **Irving B (FACSM)** (Author), Papadopoulos E (Author). Ultrasound: Validity and Reliability of Rectus Femoris and Vastus Intermedius Thickness. American College of Sports Medicine. Atlanta, GA. May 30, 2025. **(Poster)**
93. Allerton TD (Author & Presenter), Quiriarte HQ (Author), Li Z (Author), Stampley J (Author), Davis G (Author), Noland R (Author), Doiron JE (Author), Sharp TE (Author), Xia H (Author), Shah S (Author), **Irving BA** (Author), Lefer DJ. Improved Skeletal Muscle Metabolism and Exercise Capacity Following Hydrogen Sulfide Therapy in Cardiometabolic HFpEF. American Heart Association: Basic Cardiovascular Sciences. Chicago, IL. July 23, 2024 **(Poster)**.
92. Allerton TD (Author & Presenter), Doiron JE (Author), Elbatrik M (Author), Li Z (Author), Stampley J (Author), Davis G (Author), Noland R (Author), **Irving BA** (Author), Sharp TE (Author), Xia H (Author), Shah S (Author), Lefer DJ (Author). Mitochondrial Hydrogen Sulfide Regulates Skeletal Muscle Dysfunction and Exercise Intolerance in Cardiometabolic HFpEF. American Heart Association: Basic Cardiovascular Sciences. Chicago, IL. July 23, 2024 **(Poster)**.
91. Davis GM (Author & Presenter), Quiriarte HD (Author), Stampley JE (Author), Allerton TD (Author), **Irving BA** (Author). Impact Of Voluntary Wheel Running On eNOS And Muscle Microvasculature in a Model of HFpEF. American College of Sports Medicine: 2024 Annual Meeting. Boston, MA. May 2024 **(Poster)**.
90. Dennis J (Author & Presenter), Warren O (Author), Schoen J (Author), Phelan H.(Author), Carter J (Author), **Irving BA** (Author), Smith AA (Author). 19th Annual Academic Surgical Conference. "Proteomics Of Adipose Tissue Derived from Patients with Traumatic Burn Injury: A Pilot Study." Washington, DC. (February 6-8, 2024) **(Oral)**
89. **Irving BA** (Presenter). Obesity Week 2023. "When: Weight Management in Elderly and Other High-risk Groups," Sarcopenic Obesity - Where's the Beef. Dallas, TX. (October 16, 2023). **(Symposium, Oral)**
88. Heintz EC (Author & Presenter), Dantas WS (Author), Stampley JE (Author), Davis GM (Author), **Irving BA** (Author), Axelrod CL (Author), Kirwan JP (Author). Exercise Training Reverses NAFLD in Mice with Obesity Independent of Changes in Hepatic Mitochondrial Oxidative Capacity. American Diabetes Association: 2023 Annual Meeting. San Diego, CA. June 2023. **(Poster)**.
87. **Irving BA** (Author & Presenter), Stampley J (Author), Deville P (Author), Dennis J (Author), Warren O (Author), Fontenot C (Author), Smith A (Author). The Impact of Severe Burn on Adipose Tissue Mitochondrial Bioenergetics: Proof of Concept. 46th Annual Conference on Shock. Portland, OR. June 2023. **(Poster)**.
86. Stampley JE (Author & Presenter), Davis B (Author), Quiriarte H (Author), Cho E (Author), Granger J (Author), Johannsen NM (Author), Spielmann G (Author), Greenway F (Author), **Irving BA, FACSM** (Author). Effects of Resistance Training with Low-Intensity Physical Activity on Muscle Oxidative

Capacity in Older Adults. American College of Sports Medicine: 2023 Annual Meeting and World Congress. Denver, CO. June 2023. **(Oral)**.

85. Cho E (Author & Presenter), Stampley J (Author), Wall R (Author), Matthews R (Author), Zunica E (Author), **Irving B FACSM** (Author), Johannsen N (Author), Brown J (Author), Spielmann G. The Effect of Acute Exercise and Hypoxia on Natural Killer Cell Cytotoxic Function Against Tumors Expressing Different Levels of Major Histocompatibility Complex (MHC) Molecules. American College of Sports Medicine: 2023 Annual Meeting and World Congress. Denver, CO. June 2023. **(Poster)**. **Karen Hornbostel Memorial Award from the Cancer Interest Group.**
84. Davis B (Author & Presenter), Spielmann G (Author), Johannsen N (Author), **Irving BA FACSM** (Author). Impact of Blood Flow Restricted Exercise on Neuromuscular Fatigue in Trained and Untrained Adults. American College of Sports Medicine: 2023 Annual Meeting and World Congress. Denver, CO. June 2023. **(Poster)**
83. Martone M (Author & Presenter), Bloomfield SA (Author), **Irving B**, (Author), Spielmann G (Author), Johannsen N, Allaway HCM (Author). Effects Of Hindlimb Unloading and Long-Acting Reversible Contraception On Skeletal Muscle. NASA's Human Research Program Annual Meeting. Houston, TX (February 2023). **(Poster)**
82. Heintz EC (Author & Presenter), Dantas WS (Author), Stampley J (Author), Davis GM (Author), Zunica ERM (Author), **Irving BA** (Author), Davuluri G (Author), Axelrod CL (Author), Kirwan JP (Author). Exercise Training Prevents NAFLD Progression and Restores Hepatic Fatty Acid Oxidation in Mice with Obesity. Keystone Symposium: Bioenergetics in Health and Diseases, Keystone, CO (Jan 15-Jan 19, 2023). **(Oral)**
81. Bowden SD, **Irving BA**, Rees BB. Inter-individual variation in whole animal and tissue specific mitochondrial respiration in *Fundulus grandis*. American Physiological Society, Comparative Physiology, San Diego, CA, October 2022. **(Poster)**
80. Cho E (Author & Presenter), Stampley J (Author), Wall R (Author), Zunica E (Author), Brown J (Author), Johannsen NM (Author), **Irving BA** (Author), Spielmann G (Author). Acute exercise increases NK cell mitochondrial respiration and effector functions under hypoxic conditions. 15th Symposium of the International Society of Exercise and Immunology (ISEI), Tucson, AZ (Oct 24-Oct 27, 2022). **(Oral)**
79. Stampley J (Author & Presenter), Cho E (Author), Theall B (Author), Davis B (Author), Quiarte H (Author), Johannsen NM (Author), Spielmann G (Author), **Irving BA** (Author). Impact of Exercise Training on Peripheral Blood Mononuclear Cells Mitochondrial Function in Older Adults. 15th Symposium of the International Society of Exercise and Immunology (ISEI), Tucson, AZ (Oct 24-Oct 27, 2022). **(Poster)**
78. 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. San Diego, CA (May 31-Jun 4, 2022). **(Poster)**
77. Quiarte H (Author & Presenter), Lindsey K (Author), Allerton T (Author), Davis B (Author), Stampley 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. San Diego, CA (May 31-Jun 4, 2022). **(Poster)**
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). San Diego, CA **(Poster)**

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). San Diego, CA **(Poster)**
74. Stampley JE (Author & Presenter), Davis B (Author), Scott MC (Author), Quiriarte 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. San Diego, CA (May 31-Jun 4, 2022). **(Poster)**
73. Scott MC (Author & Presenter), Stampley JE (Author), Davis B, Quiriarte 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. San Diego, CA (May 31-Jun 4, 2022). **(Poster)**
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. **(Poster)**
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). **(Poster)**
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, Oral)**
68. Vincellette 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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
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) **(Poster & Oral)**

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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
59. Still C (Author & Presenter), Lutchter 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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
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). **(Poster)**

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). **(Oral)**
53. Chen Y-F (Author & Presenter), **Irving BA** (Author), Dugas 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). **(Poster)**
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, Oral)**
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). **(Poster)**
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). **(Poster)**
49. Miele MM (Author), Wenrich BR (Author), Alaparathi 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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
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). **(Oral)**
44. 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) 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). **(Poster)**

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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
37. Almandoz J (Author & Presenter), Howell J. (Author), Grothe K (Author), **Irving BA** (Author), Nelson R (Author), Miles J (Author). American Association of Clinical Endocrinologists, "Strategy for Weight Loss Through Multidisciplinary Lifestyle Approach Focusing on Calorie Deficit in Obese Patients with Type 2 Diabetes," Philadelphia, PA. (May 23, 2012). **(Poster)**
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). **(Poster)**
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). **(Oral)**
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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
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).
(Poster)

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). **(Poster)**
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). **(Poster)**
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). **(Oral)**
27. **Irving BA** (Author & Presenter), Karakileles 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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
24. **Irving BA** (Author & Presenter). American Aging Association, "DHEA in Men and Women," Scottsdale, AZ. (May 28, 2009). **(Poster)**
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). **(Poster)**
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). **(Poster)**
21. Jaleel A (Author & Presenter), Karakileles 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). **(Poster)**
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). **(Oral)**

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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
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). **(Oral)**
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). **(Poster)**
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). **(Oral)**
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). **(Poster)**
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). **(Poster)**
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). **(Poster)**

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). **(Poster)**
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). **(Oral)**
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). **(Poster)**
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). **(Poster)**
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). **(Oral)**
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). **(Oral)**
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). **(Oral)**

Regional

11. **Irving BA**. Southeast Athletic Trainers Association, "Introduction to Biosensors and their Role in Wellness Assessment and Interventions," Atlanta, GA. (March 9, 2018). **(Oral)**
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). **(Oral)**
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). **(Poster)**
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). **(Poster)**

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 Correlated to VO₂ Peak in Healthy Males and Females," San Diego, CA. (November 14, 2008). **(Poster)**
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). **(Oral)**
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). **(Poster)**
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). **(Poster)**
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). **(Poster)**
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. **(Poster)**

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. Quiriarte 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, Quiarte 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, Quiarte 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, Quiarte 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, Quiarte 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 the abstract book)**

Invited Talk

23. **Irving BA** (Author & Presenter). 17th Annual Course - Isotope Tracers in Metabolic Research: Principles and Practice of Kinetic Analysis, "Methods in Protein Metabolism", (Vanderbilt University). Nashville, TN. (November 12, 2025). Sponsor: Vanderbilt Mouse Metabolic Phenotyping Core and the NIDDK.
22. **Irving BA** (Author & Presenter). Immunoenergetics and Exercise. 2025 Mitochondrial Physiology Society Schroecken, Austria. Oroboros Workshop on high-resolution respirometry (OroW174) (June 2025),
21. **Irving BA** (Author & Presenter). Immunoenergetics and Exercise. 2025 Mitochondrial Physiology Society Summer School. Baton Rouge, LA (May 2025).
20. **Irving BA** (Author & Presenter). 16th Annual Course - Isotope Tracers in Metabolic Research: Principles and Practice of Kinetic Analysis, "Methods in Protein Metabolism", (Vanderbilt University). Nashville, TN. (November 13, 2024). Sponsor: Vanderbilt Mouse Metabolic Phenotyping Core and the NIDDK.
19. **Irving BA** (Author & Presenter). "Illuminating Skeletal Muscle Metabolism with Near Infrared Spectroscopy". ENICTO Exercise/PA Working Group (Virtual) (January 18th, 2024).
18. **Irving BA** (Author & Presenter). 15th Annual Course - Isotope Tracers in Metabolic Research: Principles and Practice of Kinetic Analysis, "Methods in Protein Metabolism", (Vanderbilt University). Nashville, TN. (November 14, 2023). Sponsor: Vanderbilt Mouse Metabolic Phenotyping Core and the NIDDK.
17. **Irving BA** (Author & Presenter). University of Florida, Proteins and Amino Acids in Human Nutrition (Dr. Cora Best Host). "Methods in Protein Metabolism", (Zoom). (Oct 26, 2023).
16. **Irving BA** (Author & Presenter). University of New Orleans. Graduate Seminar Class (Dr. Bernard Rees, Host). "Prescribing Exercise to Enhance Mitochondrial and Myocellular Adaptations," New Orleans, LA. (April 18, 2023).

15. **Irving BA** (Author & Presenter). 14th Annual Course - Isotope Tracers in Metabolic Research: Principles and Practice of Kinetic Analysis, "Methods in Protein Metabolism", (Vanderbilt University). Nashville, TN. (November 9, 2022). Sponsor: Vanderbilt Mouse Metabolic Phenotyping Core and the NIDDK.
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," Bjornrtorp 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

15. Broussard PC (Author & Presenter), Emerson C (Author), Stutzman A (Author), Irving BA (Author), **Thompson XD** (Author). Quadriceps Function Under Various Forms of Fatigue. Poster Presentation. Louisiana Biomedical Research Network Annual Meeting. Baton Rouge, LA. January 2026.

14. Davis GM (Author & Presenter), Quiarte HD (Author), Stampely JE (Author), Allerton TD (Author), **Irving BA** (Author). Impact Of Voluntary Wheel Running On eNOS And Muscle Microvasculature in a Model of HFpEF. LSU Graduate School Research Conference. Baton Rouge, LA. May 2024.
13. Davis GM, Quiarte HD, Stampely JE, Allerton TD, **Irving BA**. Impact Of Voluntary Wheel Running On eNOS And Muscle Microvasculature in a Model of HFpEF. Geauxing the Distance with Kinesiology Inaugural Research Symposium. April 4, 2024. LSU School of Kinesiology.
12. Stampely JE (Author & Presenter), Davis B (Author), Quiarte H (Author), Cho E (Author), Granger J (Author), Johannsen NM (Author), Spielmann G (Author), Greenway F (Author), **Irving BA, FACSM** (Author). Effects of Resistance Training with Low-Intensity Physical Activity on Muscle Oxidative Capacity in Older Adults. LSU Graduate School Research Conference. Baton Rouge, LA. May 2023. **(Oral)**.
11. Davis B (Author & Presenter), Spielmann G (Author), Johannsen N (Author), **Irving BA FACSM** (Author). Impact of Blood Flow Restricted Exercise on Neuromuscular Fatigue in Trained and Untrained Adults. LSU Graduate School Research Conference. Baton Rouge, LA. May 2023. **(Poster)**
10. Simmons R, (Author & Presenter), Frakes M (Author), **Irving BA** (Author), Johannsen N. LSU Discover Undergraduate Research Day. "Comparing Body Composition Changes in NCAA Division I Football Players Throughout a Season". Louisiana State University, Baton Rouge. (April, 2023).
9. Chen Y-F (Author & Presenter), Stampely 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), Alaparthy 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. Alaparthy 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

1. Allerton TD (Principal-Investigator), **Irving BA** (Co-Investigator, Sub-Award PI). "Role of Hydrogen Sulfide in Exercise Intolerance in HFpEF", Grant, NIH NHLBI, Total \$3,583,015 (Sub-Award: \$185,065) (**9% Pending Funding**) (09/01/2025-08/31/2030)

Funded

37. Thompson X (Principal-Investigator) and **Irving BA** (Supervisor). NIH NIAMS Clinical Research Loan Repayment Program Award. ROAR: Rehabilitation Outcomes following ACL Reconstruction. (2025-2027)
36. **Irving BA** (Principal-Investigator). Hamilton Syringe Grant. Sponsored by Hamilton Company. \$1,000. (June 2025).
35. **Irving BA** (Principal-Investigator). LEQSF(2024-25)-ENH-DE-03. "Enhancing Tools for Bioenergetic Analyses for Research and Teaching", Grant, Louisiana Board of Regents, \$199,798 plus LSU College of Human Sciences and Education, \$107,977. (07/01/24-06/30/25)
34. Heintz E (Principal-Investigator, Trainee), Kirwan JP (Research Mentor), **Irving BA (Academic Mentor)**, "The Role of Hepatic SLC25a25 in the Progression of NASH", Sponsored, NIH NIDDK (F31DK139728), \$135,723. (08/07/24-08/06/27).
33. Papadopoulos E (Principal-Investigator), **Irving BA** (Co-Investigator), Spielmann G (Co-Investigator), Johannsen N (Co-Investigator), Holston D (Co-Investigator), Greene M (Co-Investigator). The effects of TAURine and resistance training on indices of frailty among prefrail African American older adults. The TAURUS pilot, randomized, double-blind, placebo-controlled trial., PROVOST'S FUND FOR INNOVATION RESEARCH - Phase I, \$25,000. (07/01/24-06/30/25)
32. Papadopoulos E (Principal-Investigator); **Irving BA** (Co-Investigator), Validity and reliability of a portable handheld ultrasound scanner to assess skeletal muscle parameters of the rectus femoris and vastus intermedius, School of Kinesiology, \$2,304 awarded, date awarded: (10/10/23 – 06/30/24)
31. Johannsen N, (Principal-Investigator), Spielmann G (Co-Investigator), **Irving BA** (Collaborator)." Effect of Beverage Consumption on Net Fluid Balance and Beverage Absorption during Post-Exercise Rehydration – LSU Project 3", Grant, Coca-Cola, \$203,410. (05/01/2023-04/30/2024).
30. **Irving BA** (Principal-Investigator). "Geauxing the Distance with the Huey P. Long Fieldhouse: A Look into the Past and a Vision for the Future for Kinesiology", Grant, Provost's Fund for Innovation in Research – Conference Support Fund. \$20,000 (\$10,000 Provost Fund and \$10,000 CHSE Match). (2023-2024).
29. Stampley J (SEC Emerging Scholar) and **Irving BA (Mentor)**. The Southeastern Conference (SEC) Emerging Scholar Program. 2023-2024. ~ \$40,000. **Synopsis.** The SEC Emerging Scholars Program is meant to encourage top scholars, with attention provided to those from historically underrepresented groups, to seek out employment and mentorship within the SEC. The program is designed to provide professional development and networking opportunities for current doctoral students and a limited number of postdoctoral researchers who are considering careers in higher education.
28. **Irving BA** (Principal-Investigator). Hamilton Syringe Grant. Sponsored by Hamilton Company. \$1,000. (Aug 2023).
27. **Irving BA** (Principal-Investigator), "Proteomics Voucher – REALPA Study", Sponsored," Sponsored by National Resource for Quantitative Proteomics (R24GM137786), University of Arkansas for Medical Sciences and National Institutes of Health (NIH), Total \$2,979.00. (February 2023).

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 2023). (NCE)
25. **Irving BA** (Principal-Investigator, Mentor), Quiriarte H (Graduate Student Mentee), Spielmann G (Co-Investigator), Johannsen N (Co-Investigator), Greenway F (Co-Investigator). "R21AG058181-02S1: Diversity Supplement for Heather Quiriarte," Sponsored by National Institutes of Health - NIH, \$30,094.00. (Oct 1, 2019 - Jun 30, 2023).
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, 2023).
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** (Col, 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). (NCE)
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).

Grants Reviewed in Last Year that Were Unfunded

10. Allaway (Principal-Investigator), **Irving BA** (Co-Investigator), "Age and dose-related multi-organ responses to a continuous low-dose-rate analog of galactic cosmic radiation exposure in female rodents". Sponsored, NASA via Cleveland Clinic Foundation Subaward. Total: \$799,912 (Subaward: \$236,575) (11/01/25-10/31/28)
9. Xavier Thompson (Principal-Investigator) and **Irving BA** (Co-Investigator). Using Wearable Sensor Data to Inform Patient Assessment After ACL Reconstruction: A Feasibility Study. Sponsored, Collaboration in Action Grant. The Louisiana State University System and Our Lady of the Lake Health. \$150,274. (01/01/26-12/31/26)
8. Efthymios Papadopoulos (Principal-Investigator), **Irving BA** (Co-Investigator), Guillaume Spielmann (Co-Investigator), "Implementation of facility-based multimodal prehabilitation before colorectal cancer surgery and the context of social vulnerability among a racially diverse patient population". Sponsored, LSU Foundation. \$249,414 (01/01/26-12/31/26)
7. **Irving BA** (Principal-Investigator), Shiyu Li (Co-Principal-Investigator), Carl Giffin (Co-Investigator), "DIALOG-OA: Digital Lifestyle Intervention with GLP-1 Receptor Agonists for Osteoarthritis in Adults with Obesity and Type 2 Diabetes". Sponsored, Louisiana Board of Regents. \$252,029 (06/01/26-06/30/27)
6. Shiyu Li (PI-Principal-Investigator), **Irving BA** (Co-Investigator), DIAL-OA: Digital Active Lifestyle Intervention for Osteoarthritis Management. LSU Big Idea Grant. \$94,304. (1/01/26-12/31/26).
5. **Irving BA** (Principal Investigator), Parry H (Co-Investigator), Hand S (Co-Investigator), Sivasailam A (Postdoc). Enhancing Measurements of Mitochondrial Respiration and NADH Redox Balance: A Toolkit for Muscle Physiologists and Beyond. LSU Big Idea Grant. \$49,771. (1/01/26-12/31/26).
4. Ashok Sivasailam (Principal-Investigator), **Irving BA (Mentor)**, Allerton TD (Co-Mentor). "CSE and Hydrogen Sulfide Regulation of Skeletal Muscle Bioenergetics in HFpEF". American Heart Association Postdoctoral Fellowship. \$159,160 (1/01/26-12/31/27).
3. Cho E (Principal-Investigator), Spielmann G (Mentor), **Irving BA** (Co-Mentor). "Exercise training and body composition remodeling to improve immune function in colorectal cancer survivors," NIH NCI K99/R00 (\$1,049,940), (2024).
2. Spielmann G (Principal-Investigator), **Irving BA** (Co-Investigator), Johannsen N (Co-Investigator). Immune Restoration in Colorectal Cancer Survivors Using Aerobic and Resistance Exercise. NIH NCI, Total (\$3,725,561).(2024).
1. Papadopoulos E (Principal-Investigator), Johannsen N (Co-Investigator), Spielmann G (Co-Investigator), **Irving BA** (Co-Investigator), Stroope S (Co-Investigator), Capron D (Co-Investigator), Brown J (Sub-Award PI). Prehabilitation Among Black And White Patients Prior To Colorectal Cancer Surgery. Louisiana Board of Regents, Total (\$182,188). (2024).

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. "Use of Near Infrared Spectroscopy to Measure Mitochondrial Function" (On-Going)
3. "Method Development to Measure Mitochondrial Bioenergetics with the Oroboros NextGen
4. "Mitochondrial Phenotyping in a Mouse Model of Heart Failure with Preserved Ejection Fraction" (On-Going)

5. "Weight-Loss to Improve Functional Status Trajectories Following Total Knee Arthroplasty (SWIFT Trial)" (On-Going).
6. "Blood Cell Bioenergetic Method Optimization and Training Protocol" (On-Going).

Teaching Experience

Courses Taught

2025

Semester	Course Prefix & Number	Course Name	Section #	Enrollment
Fall	KIN 3515	PHYS BAS PHYSCL ACTV	001	49
Fall	KIN 7530	Graduate EXERCISE PHYSIOLOGY	001	4
Spring	KIN 3515	PHYS BAS PHYSCL ACTV	001	47
Spring	KIN 7550	Advanced EXERCISE PHYSIOLOGY	001	5

2024

Semester	Course Prefix & Number	Course Name	Section #	Enrollment
Fall	KIN 3515	PHYS BAS PHYSCL ACTV	001	47
Spring	KIN 3515	PHYS BAS PHYSCL ACTV	001	43
Spring	KIN 7530	EXERCISE PHYSIOLOGY	001	8

2023

Semester	Course Prefix & Number	Course Name	Section #	Enrollment
Fall	KIN 3515	PHYS BAS PHYSCL ACTV	001	45
Fall	KIN 7546	PHYS BAS PHYSCL ACTV	001	7
Spring	KIN 3515	PHYS BAS PHYSCL ACTV	002	45
Spring	KIN 7503	DIMENSIONS OF AGING	001	7

2022

Semester	Course Prefix & Number	Course Name	Section #	Enrollment
Fall	KIN 7530	EXERCISE PHYSIOLOGY	001	7
Fall	KIN 3515	PHYS BAS PHYSCL ACTV	003	39
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

Course Evaluations

Year	Semester	Course Code	Course Title	Section	Enrollment	Mean Instructor & Course Evaluation Scores	Number of Students Submitting an Evaluation
2025	Fall	KIN 3515	PHYS BAS PHYSCL ACTV	1	52	4.5/4.4	8
2025	Summer	KIN 3515	PHYS BAS PHYSCL ACTV (Online)	1	51	5.0/4.8	3
2025	Spring	KIN 3515	PHYS BAS PHYSCL ACTV	1	43	4.8/4.8	11
2025	Spring	KIN 7550	ADVANCED EXERCISE PHYSIOLOGY	1	5	5.0/4.8	2
2024	Fall	KIN 3515	PHYS BAS PHYSCL ACTV	1	46	4.8/4.9	15
2024	Spring	KIN7530	Exercise Physiology	1	8	5/5	3
2024	Spring	KIN 3515	PHYS BAS PHYSCL ACTV	1	43	4.9/4.9	20
2023	Fall	KIN 3515	PHYS BAS PHYSCL ACTV	1	40	4.9/4.8	5
2023	Fall	KIN 7546	EXERCISE METABOLISM	1	7	4.5/4.4	2
2023	Spring	KIN 3515	PHYS BAS PHYSCL ACTV	2	40	4.8/4.4	12
2023	Spring	KIN7503	DIMENSIONS OF AGING	1	7	5.0/5.0	3
2022	Fall	KIN 3515	PHYS BAS PHYSCL ACTV	3	39	4.95	6
2022	Fall	KIN 7530	EXERCISE PHYSIOLOGY	1	7	4.9	3
2022	Summer	KIN 3515	PHYS BAS PHYSCL ACTV	2	31	3.5	2

2022	Spring	KIN 3515	PHYS BAS PHYSCL ACTV	3	43	4.65	8
2022	Spring	KIN 7535	NEUROMUS ASPCTS EXER	1	8	5	4
2021	Spring	KIN 3515	PHYS BAS PHYSCL ACTV	3	42	4.4	16
2021	Spring	KIN 7546	EXERCISE METABOLISM	1	7	5	3
2020	Fall	KIN 3515	PHYS BAS PHYSCL ACTV	3	45	4.19	6
2020	Fall	KIN 7503	DIMENSIONS OF AGING	1	14	4.25	4
2020	Spring	KIN 3515	PHYS BAS PHYSCL ACTV	2	45	4.63	13
2020	Spring	KIN 7550	ADVANCED EXERCISE PHYSIOLOGY	1	10	3.91	1
2019	Fall	KIN 3515	PHYS BAS PHYSCL ACTV	2	47	4.59	22
2019	Fall	KIN 3515	PHYS BAS PHYSCL ACTV	3	43	4.64	22
2019	Spring	KIN 3515	PHYS BAS PHYSCL ACTV	1	39	4.7	25
2019	Spring	KIN 3515	PHYS BAS PHYSCL ACTV	2	39	4.7	19
2019	Spring	KIN 3515	PHYS BAS PHYSCL ACTV	1	39	4.68	25
2019	Spring	KIN 3515	PHYS BAS PHYSCL ACTV	2	39	4.57	19
2018	Fall	KIN 3515	PHYS BAS PHYSCL ACTV	1	55	4.8	36
2018	Fall	KIN 7503	DIMENSIONS OF AGING	1	15	4.9	10
2018	Spring	KIN 3515	PHYS BAS PHYSCL ACTV	1	50	4.658	23
2018	Spring	KIN 7546	EXERCISE METABOLISM	1	12	4.97	8
2017	Fall	KIN 3515	PHYS BAS PHYSCL ACTV	1	48	4.402	20

2017	Fall	KIN 3515	PHYS BAS PHYSCL ACTV	2	47	4.429	18
2017	Spring	KIN 3515	PHYS BAS PHYSCL ACTV	2	39	4.616	22
2017	Spring	KIN 7503	DIMENSIONS OF AGING	1	4	4.823	4
2016	Fall	KIN 3515	PHYS BAS PHYSCL ACTV	1	47	3.832	26
2016	Fall	KIN 7534	EXERC IN HLTH & DIS	1	5	4.819	5
2016	Spring	KIN 7503	DIMENSIONS OF AGING	1	8	4.625	8
2015	Fall	KIN 7534	EXERC IN HLTH & DIS	1	10	4.032	9

Directed Student Learning

Completed

63. Master's Non-Thesis Committee Member. Advised: Callie Hardie. (2026)
62. Master's Non-Thesis Committee Member. Advised: Alison LeBlanc. (2025)
61. Master's Non-Thesis Committee Member. Advised: Spencer Payne. (2025)
60. Supervised Research. Advised: Schilling M. (2025)
59. Dissertation Committee Member, School of Kinesiology. Advised: Jason Soileau (2025)
58. Dissertation Committee Member, School of Kinesiology. Advised: Matthew Martone (2025)
57. Supervised Research. Advised: Braud K. (2025)
56. Supervised Research. Advised: Truc Nyugen. (2024)
55. Directed Individual/Independent Study. Advised: Denolley Illvaide. (2024)
54. Master's Non-Thesis Committee Member. Advised: Robert Brundage. (2024)
53. Master's Non-Thesis Committee Member. Advised: Marisa Amos. (2024)
52. Dean's Representative on General Exam, Dissertation Proposal and Defense, Communication Disorders. "Exploring The Efficacy Of Transcutaneous Auricular Vagal Nerve Stimulation On Post-Stroke Aphasia: A Single-Subject Design Study". Advised: Aswathy Anakkathil-Pradeep. (2024)
51. Dissertation Committee Chair, "Effects of Resistance Training with Low-Intensity Physical Activity on Muscle Oxidative Capacity in Older Adults". Advised: James Stampley. (2024)
50. Dissertation Committee Member, "The Effects of Acute Hyperosmolality on Immune Cell Functions and Nutrient Sensing," Advised: Joshua Granger. (2023)
49. Master's Non-Thesis Committee Member. Advised: Christina Williams. (2023)

48. Dissertation Committee Chair, "Impact of Blood Flow Restricted Resistance Training on Skeletal Muscle Strength, Hypertrophy, Fatigue, Mitochondrial Response, and Activation". Advised: Brett Davis. (2023)
47. Dissertation Committee Member, "The Effects of Exercise on Innate Lymphoid Cells Metabolism and Function in Cancer," Advised: Eunhan Cho. (2022)
46. Dissertation Committee Member, "Impact of Exercise and Cytomegalovirus Infection On Age-Associated Changes in T-Cell Immunity," Advised: Bailey Theall. (2022)
45. Dissertation Committee Member, "Cardiovascular and Range of Motion Effects after Exercise Training," School of Kinesiology. Advised: Nollynn Sutherland. (2022)
44. Master's Non-Thesis Committee Member. Advised: Hannah Johnson. (2022)
43. Master's Non-Thesis Committee Member. Advised: Caitlyn Collins. (2022)
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 Quiriarte. (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 Vincellette. (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 Carrier. (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 Efficio 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

6. Doctoral Advisory Committee Chair, School of Kinesiology. Advised: Christina Kosti
5. Doctoral Advisory Committee Member, UNO Biological Sciences. Advised: Samantha Brieske
4. Postdoctoral Mentor. Advised: Ashok Sivasailam
3. Doctoral Advisory Committee Chair, School of Kinesiology. Advised: Gregor M. Davis
2. Doctoral Advisory Committee Chair, School of Kinesiology. Advised: Carlante Emerson
1. Doctoral Advisory Committee Chair, School of Kinesiology. Advised: Elizabeth Heintz (Dr. John Kirwan is the primary research mentor)

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 & Translational 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

21. Workshop. 2025 Meauxmentum Summit. Lafayette, LA (April 2025).
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

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

Committee Member, Endocrinology/Pharmacology Search Committee (2024-2025)

Committee Chair, Biotechnology/Biosensor Search Committee (2024-2025)

Program Committee Chair, Geauxing the Distance Inaugural Kinesiology Symposium. April 4-5th. Four Internationally Recognized Speaker (Drs. Scott Powers, Kirsten Kucera, Jana Iverson, Ang Chen) and over 240 attendees.

Committee Member, Sports Science Search Committee (2023-2024)

Committee Member, Motor Behavior Search Committee Position 2 (2023-2024)

Committee Member, Motor Behavior Search Committee Position 1 (2023-2024)

Committee Member, LSU CHSE Discovery & Research Committee (2023-Present)

Committee Member, Assistant/Associate Professor of Biostats/Epi, Public Health Search Committee. (2022-2023).

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

Committee Chair, Assistant Professor of Exercise Physiology Search Committee. (2019&2020).

Attendee, Huey P Long Field House Renovation. (2019 - 2023).

Committee Member, LSU Life Course on Aging (LCAC). (September 2015 - 2020).

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

Organizer and Host, LSU – Oroboros Workshop on High-Resolution Respirometry with the Oroboros NextGen O2k, (OroW173). Baton Rouge, LA (2025)

Ad Hoc Committee Member, American College of Sports Medicine Planning Committee (2025-Present)

Organizing Committee Member, 2025 MiP Summer School, Baton Rouge, LA (June 2024-2025)

Meeting Chair, International Biochemistry of Exercise Conference. (Proposal Under Review for 2026)

Extended Board Member, Mitochondrial Physiology Society. (2023-Present)

Member of International Scientific Committee Member, Bioblast 2022: BEC Inaugural Conference.

<https://doi.org/10.26124/bec:2022-0001>. Innsbruck, Austria. (Jun 29-Jun 30, 2022)

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, German Research Foundation (DFG). (2025).

Reviewer, Grant Proposal, LaCATS Pilot, and Feasibility. (2025).

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. (2025).

Reviewer, American College of Sports Medicine. (2024).

Reviewer, American College of Sports Medicine. (2023).

Reviewer, Southeast Chapter of the American College of Sports Medicine. (2022).

Reviewer, American College of Sports Medicine. (2022).

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

PLOS One

Obesity

PeerJ

PNAS

Reviewer, Promotion, and Tenure

University of Florida: Ashley Smuder (2025)

University of Maryland: Sarah Kuzmiak-Glancy (2025)

University of Kentucky: Stuart Best (2024)

Colorado State University – Colorado Springs: Robert Jacobs (2022)

Oklahoma University: Jeremy Mickahil Kellawan (2022)

Chatham University: John Dube (2019)

Session Chair

Session Chair, 2025 Mitochondrial Physiology Society Summer School. Baton Rouge, LA (May 2025).

Session Chair, 2025 American College of Sports Medicine. "NIRS and Non-Invasive Measures of Tissue Oxygenation and Mitochondrial Capacity." Atlanta, Georgia (May 2025)

Session Chair, Optimization Of Health, Performance, & Resilience: Courtside, Warside, & Spaceside. Baton Rouge, LA (Dec 2024).

Session Chair, LSU Graduate School Research Conference. Baton Rouge, LA (May 2024).

Session Chair, LSU Graduate School Research Conference. Baton Rouge, LA (May 2023).

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).