VITAE

TIMOTHY P. GAVIN

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Education and Training

1996 – 1999 University of California, San Diego, La Jolla, CA
Postdoctoral Fellowship: Faculty Mentor - Peter D. Wagner, M.D.
Department of Medicine, School of Medicine
Research Area: Skeletal Muscle Angiogenesis

1991 - 1996 Indiana University, Bloomington, IN
Doctor of Philosophy: Faculty Mentor – Joel M. Stager, Ph.D.
Department of Kinesiology, School of Health, Physical Education, and Recreation
Major: Human Performance - Exercise Physiology
Minor: Biology - Endocrinology

1988 - 1990 Indiana University, Bloomington, IN
Master of Science
Department of Kinesiology, School of Health, Physical Education, and Recreation
Major: Exercise Physiology

1981 - 1985 Indiana University, Bloomington, IN
Bachelor of Science
Department of Operation and Decision Technologies, Kelley School of Business
Major: Quantitative Business Analysis

Professional Experience

Purdue University

2012-Present	Department Head, Department of Health and Kinesiology
2012-Present	Professor, Department of Health and Kinesiology

East Carolina University

2012-Present	Adjunct Professor, Department of Kinesiology
2010-2012	Professor, Departments of Kinesiology and Physiology
2010-2012	Assistant Chair, Department of Kinesiology
2008-2010	Exercise Physiology Concentration Director for the MS in EXSS
2006-2010	Associate Professor, Departments of Kinesiology and Physiology
2000-2006	Assistant Professor, Departments of Kinesiology and Physiology
2000-2003	Adjunct Professor, Department of Surgery

University of California, San Diego

1999-2000	Assistant Project Physiologist, Department of Medicine
1996-1999	Postdoctoral Fellow, Department of Medicine

Indiana University

1991-1996	Associate Instructor and Research Assistant, Department of Kinesiology
1990-1991	Assistant University Registrar
1988-1990	Research Assistant, Department of Kinesiology

Arthur Andersen & Co.

1985-1988	Management Consultant, Chicago, IL

Administrative Leadership Training

2023	American Kinesiology Association (AKA) Leadership Workshop - Social Justice and Equity Imperatives: A Call to Action
2022	American Kinesiology Association (AKA) Leadership Workshop - Leadership for the future: Vision, values, and practice
2021	Purdue University: Speaking Up: How Bystanders Can Change the Conversation about Social Bias
2021	American Kinesiology Association (AKA) Leadership Workshop - Leading through Times of Uncertainty: The Future of Higher Education, Work, and Kinesiology
2020	Purdue University: Transformative Plans: Faculty Promoting Positive Change
2020	American Kinesiology Association (AKA) Leadership Workshop: Promoting Physical Activity through Kinesiology Teaching and Outreach: An Eye Toward the Future
2019	American Kinesiology Association (AKA) Leadership Workshop: Hiring, Evaluating, and Retaining Kinesiology Faculty
2019	Purdue University: Organizational Change for Gender Equity in STEM Academic Professions (ADVANCE)
2018	American Kinesiology Association (AKA) Leadership Workshop: The Future Direction of Undergraduate Education in Kinesiology
2018	American Kinesiology Association (AKA) Leadership Workshop: Best Practices for Internships
2017	American Kinesiology Association (AKA) Leadership Workshop: Building and Sustaining Relationships with Campus and Community Colleagues, Programs, and Organizations
2018	American Kinesiology Association (AKA) Leadership Workshop: Kinesiology and the Future of Athletic Training
2016	American Kinesiology Association (AKA) Leadership Workshop: Innovation and Entrepreneurship in a Time of Shrinking Budgets
2016	American Kinesiology Association (AKA) Leadership Workshop: Faculty Evaluations to Select, Develop, Motivate, and Assess Faculty
2015	American Kinesiology Association (AKA) Leadership Workshop: The Intersection of Physical Activity and Public Health: Opportunities for Kinesiology
2014	American Kinesiology Association (AKA) Leadership Workshop: The Future of Teaching and Learning in an Online World
2014	American Kinesiology Association (AKA) Workshop: Establishing Learning Outcomes for Core Categories in Kinesiology
2013	American Kinesiology Association (AKA) Workshop: Enhancing Diversity in Kinesiology

2013 American Kinesiology Association (AKA) Workshop: Effective Leadership Strategies for Developing, Implementing, and Assessing a Department's Strategic Plan
2013 Committee on Institutional Cooperation (CIC) Leadership Workshop: Department Executive Officer (DEO) Seminar
2012-13 Purdue University: New Department Head Leadership Development Seminars
2012-present Purdue University: Department Head Forums

Awards and Honors

Herman F. Lieber Scholar, Beta Theta Pi fraternity at Indiana University, 1985
National Institutes of Health, Individual National Research Service Award, 1996-1999
Glaxco Smith Kline - Fellow to the American Thoracic Society Annual Meeting, San Diego, CA, 2000
East Carolina University, College of Health and Human Performance Researcher of the Year, 2004-2005
Fellow, American College of Sports Medicine, Awarded 2006
W. James Metzger, Jr., M.D. Young Investigator Award, Department of Internal Medicine, East Carolina University, 2006
Active Fellow #586, National Academy of Kinesiology. Inducted 2019
W.W. Patty Distinguished Alumni Award, Indiana University School of Public Health-Bloomington, 2021

Major Research/Professional Interests

Skeletal muscle and exercise physiology in health and disease with an emphasis on changes in exercise tolerance, metabolism, and vascular regulation.

Professional Organizations

American College of Sports Medicine, 1992 - Present
American Physiological Society, 1995 - Present
Grant Reviewer – Diabetes UK, Florida Department of Citrus, NIH Peer Review Committee: Common Fund – Molecular Transducers of Physical Activity Consortium (MoTrPAC) in Humans, Natural Sciences and Engineering Research Council of Canada (NSERC), Canada Foundation for Innovation

Invited Reviewer - *Acta Physiologica; Advances in Physiology Education; American Journal of Physiology; Applied Physiology, Nutrition, and Metabolism; BMC Biology; BMC Physiology; Circulation; Clinical Chemistry and Laboratory Medicine; Diabetes; Ergonomics; Exercise and Sports Science Review; Experimental Physiology; High Altitude Medicine & Biology, Human and Experimental Toxicology; International Journal of Sports Medicine; Journal of Applied Physiology; Journal of Physiology; Journal of Sport Sciences; Medicine and Science in Sports and Exercise; Obesity; Science*

Manuscripts

1. Gavin TP, PA Derchak, and JM Stager. Ventilation's role in the decline in $\dot{V}O_{2MAX}$ and Sa_{O_2} in acute hypoxic exercise. *Med Sci Sports Exerc.* 30(2): 195-199, 1998.
2. Roca J, TP Gavin, M Jordan, N Siafakas, H Wagner, H Benoit, EC Breen, and PD Wagner. Angiogenic growth factor mRNA responses to passive and contraction-induced hyperperfusion in skeletal muscle. *J Appl Physiol.* 85(3): 1142-1149, 1998.

3. Hopkins SR, TP Gavin, NM Siafakas, LJ Haseler, IM Olfert, H Wagner, and PD Wagner. Effect of prolonged, heavy exercise on pulmonary gas exchange in athletes. *J Appl Physiol.* 85(4): 1523-1532, 1998.
4. Richardson RS, B Grassi, TP Gavin, LJ Haseler, K Tagore, J Roca, and PD Wagner. Evidence of O_2 supply-dependent $\dot{V}O_2MAX$ in the exercise-trained human quadriceps. *J Appl Physiol.* 86(3): 1048-1053, 1999.
5. Gavin TP and JM Stager. The effect of exercise modality on exercise-induced hypoxemia. *Respir Physiol.* 115(3): 317-322, 1999.
6. Barker RC, SR Hopkins, N Kellogg, IM Olfert, TD Brutsaert, TP Gavin, PL Entin, AJ Rice, and PD Wagner. Measurement of cardiac output during exercise by open circuit acetylene uptake. *J Appl Physiol*. 87(4): 1506-1512, 1999.
7. Gavin TP, DA Spector, H Wagner, EC Breen, and PD Wagner. Nitric oxide synthase inhibition attenuates the skeletal muscle VEGF mRNA response to exercise. *J Appl Physiol*. 88(4): 1192-1198, 2000.
8. Gavin TP, DA Spector, H Wagner, EC Breen, and PD Wagner. Effect of captopril on skeletal muscle angiogenic growth factor responses to exercise. *J Appl Physiol*. 88(5): 1698-1706, 2000.
9. Hopkins SR, RC Barker, TD Brutsaert, TP Gavin, PM Entin, IM Olfert, S Veisel, and PD Wagner. Pulmonary gas exchange during exercise in women: effect of exercise type and work increment. *J Appl Physiol*. 89(2): 721-730, 2000.
10. Gavin TP and PD Wagner. Effect of short-term exercise training on angiogenic growth factor responses in rats. *J Appl Physiol*. 90(4): 1219-1226, 2001.
11. Gavin TP, JP Babington, CA Harms, ME Ardelt, DA Tanner, and JM Stager. Clothing fabric does not affect thermoregulation during exercise in moderate heat. *Med Sci Sports Exerc.* 33(12): 2124-2130, 2001.
12. Gavin TP and PD Wagner. Acute ethanol increases angiogenic growth factor gene expression in rat skeletal muscle. *J Appl Physiol*. 92: 1176-1182, 2002.
13. Brutsaert TD, TP Gavin, Z Fu, EC Breen, K Tang, O Mathieu-Costello, and PD Wagner. Regional differences in expression of VEGF mRNA in rat gastrocnemius following 1 hr exercise or electrical stimulation. *BMC Physiol. (Online Journal)*. 2: 8 (19 June 2002), 2002.
14. Gavin TP and PD Wagner. Attenuation of the exercise-induced increase in skeletal muscle Flt-1 mRNA by nitric oxide synthase inhibition. *Acta Physiol Scand.* 175(3): 201-209, 2002.
15. Gavin TP Clothing and thermoregulation during exercise. *Sports Med*. 33(13): 941-947, 2003.
16. Gavin TP, CB Robinson, RC Yeager, JA England, LW Nifong, and RC Hickner. Angiogenic growth factor response to acute systemic exercise in human skeletal muscle. *J Appl Physiol.* 96(1): 19-24, 2004.
17. Richardson RS, BT Leek, TP Gavin, LJ Haseler, SRD Mudaliar, R Henry, AL Ries, O Mathieu-Costello, and PD Wagner. Reduced mechanical efficiency in COPD, but normal peak VO_2 with small muscle mass exercise. *Am J Crit Care Med.* 169(1): 89-96, 2004.
18. Kraus RM, HW Stallings, III, RC Yeager, and TP Gavin. Circulating plasma VEGF response to exercise in sedentary and endurance trained men. *J Appl Physiol.* 96(4): 1445-1450, 2004.
19. Gavin TP, HW Stallings, III, KA Zwetsloot, LM Westerkamp, NA Ryan, RA Moore, WE Pofahl, and RC Hickner. Lower capillary density, but no difference in VEGF expression in obese versus lean young skeletal muscle in humans. *J Appl Physiol.* 98(1): 315-21, 2005.
20. Croley AN, KA Zwetsloot, LM Westerkamp, NA Ryan, AM Pendergast, RC Hickner, WE Pofahl, and TP Gavin. Lower capillarization, VEGF protein, and VEGF mRNA response to acute exercise in the vastus lateralis muscle of aged versus young women. *J Appl Physiol.* 99(5): 1872-1879, 2005.

21. Ryan NA, KA Zwetsloot, LM Westerkamp, RC Hickner, WE Pofahl, and TP Gavin. Lower skeletal muscle capillarization and VEGF expression in aged versus young men. *J Appl Physiol.* 100(1): 178-185, 2006.
22. Gavin TP, LM Westerkamp, and KA Zwetsloot. Soleus, plantaris, and gastrocnemius VEGF mRNA responses to hypoxia and exercise are preserved in aged compared to young female C57BL/6 mice. *Acta Physiol.* 188: 113-121, 2006.
23. Olfert IM, EC Breen, TP Gavin, and PD Wagner. Temporal thrombospondin-1 mRNA response in skeletal muscle exposed to acute and chronic exercise. *Growth Factors*. 24: 253–259, 2006.
24. Focht BC, DJ Knapp, TP Gavin, TD Raedeke, and RC Hickner. Affective and self-efficacy responses to acute exercise in sedentary older and younger adults. *J Aging Phys Activity*. 15: 123-138, 2007.
25. Gavin TP, JL Drew, CJ Kubik, WE Pofahl, and RC Hickner. Acute resistance exercise increases skeletal muscle angiogenic growth factor expression. *Acta Physiol.* 191: 139-146, 2007.
26. Gavin TP, RS Ruster, JA Carrithers, KA Zwetsloot, RM Kraus, CA Evans, DJ Knapp, JL Drew, JS McCartney, JP Garry, and RC Hickner. No difference in the skeletal muscle angiogenic response to aerobic exercise training between young and aged men. *J Physiol*. 585: 231-239, 2007.
27. Wooldridge AA, CN Fortner, T Akimoto, RL Neppl, C Facemire, MB Datto, A Kwon, E McCook, P Li, S Wang, RJ Thresher, SE Miller, JC Perriard, TP Gavin, RC Hickner, TM Coffman, AV Somlyo, Z Yan, and TAJ Haystead. Deletion of the PKA/PKG target SMTNL1 promotes an exercise adapted phenotype in vascular smooth muscle. *J Biol Chem*. 283: 11850-11859, 2008.
28. Zwetsloot, KA, BF Holmes, LM Westerkamp, and TP Gavin. AMPK regulates basal skeletal muscle capillarization and VEGF expression, but is not necessary for the angiogenic response to exercise. *J Physiol.* 586: 6021-6035, 2008.
29. Gavin TP. Basal and exercise-induced regulation of skeletal muscle capillarization. *Exerc Sport Sci Rev*. 37:86-92, 2009.
30. Gavin TP, RC Sloan III, EZ Lukosius, MA Reed, JR Pender, V Boghossian, JJ Carter, RD McKernie, K Parikh, JW Price, EB Tapscott, WJ Pories, and GL Dohm. Duodenal-jejunal bypass surgery does not increase skeletal muscle insulin signal transduction or glucose disposal in Goto-Kakazaki type 2 diabetic rats. *Obes Surg.* 21: 231-237, 2011.
31. Boyle K, J Canham, L Consitt, D Zheng, T Koves, TP Gavin, D Holbert, PD Neufer, O Ilkayeva, D Muoio, and JA Houmard. A high fat diet elicits differential responses in genes coordinating oxidative metabolism in skeletal muscle of lean and obese individuals. *J Clin Endocrinol Metab*. 96: 775-781, 2011.
32. Perry CGR, DA Kane, C-T Lin, R Kozy, BL Cathey, DS Lark, CL Kane, PM Brophy, TP Gavin, EJ Anderson, PD Neufer. Inhibiting myosin-ATPase reveals dynamic range of mitochondrial repiratory control in skeletal muscle. *Biochem J*. 437: 215-222, 2011.
33. Reed MA, WJ Pories, W Chapman, J Pender, R Bowden, H Barakat, TP Gavin, T Green, E Tapscott, D Zheng, N Shankley, L Yieh, D Polidori, SP Piccoli, L Breener-Gati, GL Dohm. Roux-en-Y Gastric Bypass Corrects Hyperinsulinemia Implications for the Remission of Type 2 Diabetes. *J Clin Endocrinol Metab*. 8: 2525-2531, 2011.
34. Gavin TP, JB Van Meter, PM Brophy, GS Dubis, KN Potts, RC Hickner. Comparison of a field based test to estimate functional threshold power and power output at lactate threshold. *J Strength Cond Res*. 26: 416-421, 2012.
35. Fisher-Wellman KH, TM Weber, BL Cathey, PM Brophy, LA Gilliam, CL Kane, JM Maples, TP Gavin, RN Cortright, JA Houmard, PD Neufer. Mitochondrial respiratory capacity and content are normal in young insulin-resistant obese humans. *Diabetes*. 63: 132-141, 2014.

36. Gavin TP, JM Ernst, SE Caudill, GL Dohm, WJ Pories, M Dar, MA Reed. Insulin sensitivity is related to glycemic control in type 2 diabetes and diabetes remission after RYGB. *Surgery*. 155: 1036-1043, 2014.
37. Camarillo I, L Clah, W Zheng, X Zhou, B Larrick, N Blaize, E Breslin, N Patel, D Johnson, D Teegarden, SS Donkin, TP Gavin, S Newcomer. Maternal Exercise During Pregnancy Reduces Risk of Mammary Tumorigenesis In Rat Offspring. *Eur J Cancer Prev*. 23: 502-5, 2014.
38. La Favor JD, RM Kraus, JA Carrithers, SL Roseno, TP Gavin, RC Hickner. Sex Differences with Aging in Nutritive Skeletal Muscle Blood Flow: Impact of Exercise Training, Nitric Oxide, and Alpha-Adrenergic Mediated Mechanisms. *Am J Physiol Heart Circ Physiol*. 15: 307:H524-32, 2014.
39. Gavin TP, RM Kraus, JA Carrithers, JP Garry, RC Hickner. Aging and the skeletal muscle angiogenic response to exercise in women. *J Gerontol A Biol Sci Med Sci*. 70: 1189-1197, 2015.
40. Nie Y, TP Gavin, S Kuang. Measurement of Resting Energy Metabolism in Mice Using Oxymax Open Circuit Indirect Calorimeter. *Bio-Protocol*. 5(18): e1602, http://www.bio-protocol.org/e1602, 2015.
41. Freedson P, DA Buckner, R Pate, B Hatfield, L DiPietro, DA Dzewaltowski, TP Gavin, J Nessler. Integrating Public Health in Kinesiology: Instruction, Academic Programs, Research, and Outreach. *Kinesiology Review*. 4: 355-369, 2015.
42. Kuhlenhoelter AM, K Kyoungrae, D Neff, Y Nie, AN Blaize, BJ Wong, S Kuang, J Stout**,** Q Song**,** TP Gavin, ad BT Roseguini. Heat therapy promotes the expression of angiogenic regulators in human skeletal muscle. *Am J Physiol*. 311: R377-91, 2016.
43. Nie Y, Y Sato, C Wang, F Yue, S Kuang, TP Gavin. Impaired exercise tolerance, mitochondrial biogenesis, and muscle fiber maintenance in miR-133a deficient mice. *FASEB J*. 30: 3745-58, 2016.
44. Jenkins JS, LJ Patel, TP Gavin. No Difference in Plantar Flexion Maximal Exercise Power Output Between Men and Women. *Sport Sci Health*. 13: 139-147, 2017. doi:10.1007/s11332-016-0330-9
45. Constantini K, DA Tanner, TP Gavin, CA Harms, JM Stager, RF Chapman. Prevalence of Exercise Induced Arterial Hypoxemia in Distance Runners at Sea Level. *Med Sci Sports Exerc.* 49: 948-954, 2017.
46. Yue F, P Bi, X Yang, C Wang, T Shan, Y Nie, TL Ratliff, TP Gavin, S Kuang. Pten enforces Notch signaling to maintain the quiescence and self-renewal of adult muscle stem cells. *Nat Commun.* 8: 14328, 2017. doi: 10.1038/ncomms14328
47. Gavin TP, JM Ernst, H-B Kwak, SE Caudill, MA Reed, RT Garner, Y Nie, JA Weiss, WJ Pories, M Da, C-T Lin, MJ Hubal, PD Neufer, S Kuang, and GL Dohm. High incomplete skeletal muscle fatty acid oxidation explains low muscle insulin sensitivity in poorly controlled T2D. *J Clin Endocrinol Metab*. 103: 882-889, 2018. doi: 10.1210/jc.2017-01727
48. Lawan A, K Min, L Zhang, A Canfran-Duque, MJ Jurczak, JG Camporez, Y Nie, TP Gavin, GI Shulman, C Hernandez-Fernando, AM Bennett. Skeletal muscle-specific deletion of MKP-1 reveals a p38 MAPK/JNK/Akt signaling node that regulates obesity-induced insulin resistance. *Diabetes*. 67: 624-635, 2018. doi: 10.2337/db17-0826.
49. Kobos LM, S Adamson, S Evans, TP Gavin, JH Shannahan. Altered Formation of the Iron Oxide Nanoparticle-Biocorona due to the Effects of Individual Variability and Exercise. *Environ Toxicol Pharmacol*. 62: 215-226, 2018. doi: 10.1016/j.etap.2018.07.014.
50. Kim K, S Kuang, Q Song, TP Gavin, BT Roseguini. Impact of heat therapy on recovery following eccentric exercise in humans. *J Appl Physiol*. 126: 965-975, 2019. http://doi:10.1152/japplphysiol.00910.2018

51. Vadlamani A, Y Nie, DA Detwiler, A Dhanabal, AM Kraft, S Kuang, TP Gavin, AL Garner. Nanosecond Electric Pulse Induced Proliferation and Differentiation of Osteoblasts and Myoblasts. *J R Soc Interface*. 16: 20190079. 2019. doi.org/10.1098/rsif.2019.0079.
52. Solfest JS, Y Nie, JA Weiss, RT Garner, S Kuang, J Stout, TP Gavin. Effects of acute aerobic and concurrent exercise on skeletal muscle metabolic enzymes in untrained men. *Sport Sci Health*. 15:417-426, 2019. doi.org/10.1007/s11332-019-00547-z
53. Nie Y, Y Sato, RT Garner, C Kargl, C Wang, S Kuang, CJ Gilpin, TP Gavin. Skeletal muscle derived exosomes regulate endothelial cell functions via reactive oxygen species activated NF-κB signaling. *Exp Physiol*. 104: 1262-1273, 2019.
54. Jia Z, Y Nie, F Yue, Y Kong, L Gu, TP Gavin, X Liu, and S Kuang. A requirement of Polo-like kinase 1 in murine embryonic myogenesis and adult muscle regeneration. *eLife* 2019;8:e47097 doi: 10.7554/eLife.47097
55. Kargl CK, Y Nie, S Evans, J Stout, JH Shannahan, S Kuang, TP Gavin. Factors secreted from high glucose treated endothelial cells impair expansion and differentiation of human skeletal muscle satellite cells. *J Physiol*. 597: 5109-5124, 2019. doi: 10.1113/JP278165.
56. Garner RT. JS Solfest, Y Nie, S Kuang, J Stout, TP Gavin. Multivesicular Body and Exosome Pathway Responses to Acute Exercise. *Exp Physiol*. 105: 511–521, 2020. doi: 10.1113/EP088017
57. Kim K, B Reid, C Casey, B Bender, B Ro, Q Song, A Trewin, A Petersen, S Kuang, TP Gavin, BT Roseguini. Effects of repeated local heat therapy on skeletal muscle structure and function in humans. *J Appl Physiol*. 128: 483-492, 2020. http://doi.org/10.1152/japplphysiol.00701.2019
58. Kim K, J Monroe, TP Gavin, BT Roseguini. Skeletal muscle adaptations to heat therapy. *J Appl Physiol*. 128:1635-1642, 2020. http://doi.org/10.1152/japplphysiol.00061.2020
59. Kargl CK, BP Sullivan, TP Gavin. Invited Editorial. Massage during muscle unloading increases protein turnover in the massaged and non-massaged, contralateral limb, but does not attenuate muscle atrophy. *Acta Physiol*. 229:e13497, 2020. http://doi.org/10.1111/apha.13497
60. Kim K, JC Monroe, TP Gavin, BT Roseguini. Local heat therapy to accelerate recovery following exercise-induced muscle damage. *Exerc Sport Sci Rev*. 48:163-169, 2020. http://doi.org/10.1249/JES.0000000000000230
61. Sullivan BP, JA Weiss, Y Nie, RT Garner, CJ Drohan, S Kuang, J Stout, TP Gavin. Skeletal Muscle IGF-1 is Lower at Rest and After Resistance Exercise in Humans with Obesity. *Eur J Appl Physiol*. 120:2835-2846, 2020. https://doi.org/10.1007/s00421-020-04509-z
62. Hettinger Z, C Kargl, JH Shannahan, S Kuang, TP Gavin. Extracellular vesicles released from stress-induced prematurely senescent myoblasts impair endothelial function and proliferation. *Exp Physiol*. 106: 2083-2095, 2021. http://doi.org/10.1113/EP089423
63. Kim K, C Kargl, B Ro, Q Song, K Stein, TP Gavin, and BT Roseguini. Neither peristaltic pulse dynamic compressions nor heat therapy accelerate glycogen resynthesis following intermittent running. *Med Sci Sports Exerc*. 53: 2425-2435, 2021. http://doi.org/10.1249/MSS.0000000000002713
64. Sullivan BP, Y Nie, S Evans, C Kargl, Z Hettinger, RT Garner, MJ Hubal, S Kuang, J Stout, TP Gavin. Obesity and Exercise Training Alter Inflammatory Pathway Skeletal Muscle Small Extracellular Vesicle miRNAs. *Exp Physiol*. 107: 462-475, 2022. http://doi.org/10.1113/EP090062
65. Garner RT, JA Weiss, Y Nie, BP Sullivan, CJ Drohan, S Kuang, J Stout, TP Gavin. Effects of obesity and acute resistance exercise on skeletal muscle angiogenic communication pathways. *Exp Physiol*. 107:906-918, 2022. http://dx.doi.org/10.1113/EP090152.
66. Monroe JC, BJ Pae, C Kargl, TP Gavin, J Parker, SM Perkins, Y Han, J Klein, RL Motaganahalli, BT Roseguini. Effects of home-based leg heat therapy on walking performance in patients with

symptomatic peripheral artery disease: a pilot randomized trial. *J Appl Physiol*. 133: 546-560, 2022. https://doi.org/10.1152/japplphysiol.00143.2022.

67. Kargl CK, BP Sullivan, D Middleton, A York, L Burton, JJ Brault, S Kuang, TP Gavin. PGC-1α Overexpression Improves Angiogenic Signaling Potential of Skeletal Muscle-derived Extracellular Vesicles. *Exp Physiol*. 108: 240-252, 2023. http://dx.doi.org/10.1113/EP090874
68. Ross M, CK Kargl, R Ferguson, TP Gavin, Y Hellsten. Exercise-Induced Skeletal Muscle Angiogenesis - Impact of Age, Sex, Angiocrines and Cellular Mediators. *Eur J Appl Physiol*. 123: 1415-1432, 2023. https://doi.org/10.1007/s00421-022-05128-6

Abstracts Since 2018

1. Kobos L, S Adamson, S Evans, T Gavin, J Shannahan. Individual Variability and the Influence of Exercise in the Composition of the Nanoparticle-Biocorona. Society of Toxicology. San Antonio, TX. March 2018.
2. Kargl CK, Y Nie, RT Garner, S Evans, ZR Hettinger, B Sullivan, TP Gavin. Effects of Obese Skeletal Muscle Cells on Endothelial Cell Angiogenesis. ACSM. Minneapolis, MN, May 2018.
3. Sullivan BP, JA Weiss, RT Garner, Y Nie, TP Gavin. Altered Skeletal Muscle IGF-1 and miR-206 at Rest and Following Resistance Exercise in Obese Humans. ACSM. Minneapolis, MN, May 2018.
4. Hettinger ZR, Y Nie, RT Garner, CK Kargl, SH Patel, S Kuang, TP Gavin. Serial Passaging Reduces Replication and Fusion Capacity of Primary Human Skeletal Muscle Satellite Cells. ACSM. Minneapolis, MN, May 2018.
5. Garner RT, Y Nie, TP Gavin. Effect of Acute Exercise on Skeletal Muscle Exosome Biogenesis. ACSM. Minneapolis, MN, May 2018.
6. Kim K, A Trewin, AC Petersen, TP Gavin, BT Roseguini. Impact of repeated local heat therapy on skeletal muscle structure and function in humans. Experimental Biology. Orlando, FL, April 2019.
7. Kargl CK, ZR Hettinger, S Kuang, TP Gavin. Senescent skeletal muscle satellite cells exosomes induce endothelial cell senescence and impair angiogenesis. ACSM. Orlando, FL, May 2019.
8. Garner RT, JA Weiss, Y Nie, S Kuang, TP Gavin. Effects of obesity and acute resistance exercise on skeletal muscle intercellular communication pathways. ACSM. Orlando, FL, May 2019.
9. Sullivan BP, Y Nie, S Evans, CK Kargl, ZR Hettinger, M Hubal, S Kuang, J Stout, TP Gavin. Effect of short-term concurrent exercise training on skeletal muscle exosomal miRNAs in lean and obese. ACSM. Orlando, FL, May 2019.
10. Kargl CK, ZAL Yang, Z Jia, S Kuang, JH Shannahan, TP Gavin. Skeletal muscle extracellular vesicles regulate endothelial cells in a fiber type dependent manner. Experimental Biology. 2021.
11. Sullivan BP, AL Ellis, CK Kargl, S Kuang, TP Gavin. Effect of PGC1-α overexpression on cardiotoxin-induced damage and repair of human myotubes. Experimental Biology. 2021.
12. Belbis MD, MJ Holmes, J Yao, CW Kinnick, CK Kargl, C Day, NL Noel, TP Gavin, BT Roseguini, DM Hirai. Effects of acute selective COX-2 inhibition on skeletal muscle microvascular oxygenation and exercise tolerance. ACSM. San Diego, CA, May 2022.
13. Burton LC, CK Kargl, TP Gavin. Differences in regulatory genes involved in myoblast growth and differentiation into myotubes in type 2 diabetic human muscle. ACSM. San Diego, CA, May 2022.
14. Kargl CK, D Shera, BP Sullivan, Z Jia, M Hubal, S Kuang, TP Gavin. Skeletal muscle extracellular vesicle contents and angiogenic signaling differ between oxidative and glycolytic muscle. ACSM. San Diego, CA, May 2022.
15. Belbis MD, B Ro, LE Schepers, KH Him, K Kim, TE Ryan, CJ Goergen, S Kuang, TP Gavin, BT Roseguini, DM Hirai. Effects of heat therapy on skeletal muscle interstitial oxygenation and exercise tolerance in HFpEF rats. American Physiological Summit. Long Beach, CA, April 2023.

16. Kargl CK, BP Sullivan, D Middleton, A York, L Burton, JJ Brault, S Kuang, TP Gavin. PGC-1α Overexpression Improves Angiogenic Signaling Potential of Skeletal Muscle-derived Extracellular Vesicles. ACSM. Denver, CO. May 2023.
17. Baumgartner NW, MD Belbis, CK Kargl, TP Gavin, SC Kao. The effect of acute high-intensity resistance exercise on memory. NASPSPA. Toronto, CA. 2023.
18. Schultz TA, ME Fister, Belbis MD, B Ro, LE Schepers, K Kim, TE Ryan, CJ Goergen, S Kuang, TP Gavin, BT Roseguini, DM Hirai. Effects of heat therapy on skeletal muscle interstitial PO2 kinetics and mitochondrial respiration in HFpEF rats. MWACSM. Indianapolis, IN, October 2023.

Invited Talks and Professional Presentations

1. Exercise Induced Angiogenesis. University of North Texas. Denton, TX. 1997
2. Exercise Induced Angiogenesis. Indiana University. Bloomington, IN. 1997
3. Effect of Exercise Modality in Exercise Induced Arterial Hypoxemia (EIAH). American College of Sports Medicine. St. Louis, MO. 2002.
4. Symposium organizer - Regulation of muscle fiber size by non-muscle cell systems. Southeast American College of Sports Medicine Conference, Charlotte, NC, February 2005.
5. Regulation of muscle fiber size by non-muscle cell systems - Capillaries. Southeast American College of Sports Medicine Conference, Charlotte, NC, February 2005.
6. Symposium organizer - Regulation of muscle fiber size by non-muscle systems. ACSM Annual Meeting. Denver, CO. 2006.
7. Role of Capillaries in Regulating Skeletal Muscle Fiber Size. ACSM Annual Meeting. Denver, CO. 2006.
8. Regulation of Skeletal Muscle Capillarization. Indiana University. Bloomington, IN. 2006.
9. Bariatric Surgery and Reversal of Type 2 Diabetes. Grand Rounds. Department of Pathology. Brody School of Medicine. East Carolina University. 2008.
10. Skeletal Muscle Insulin Sensitivity in T2DM. Ball State University. 2013
11. Skeletal Muscle Insulin Sensitivity in T2DM. Indiana University - Bloomington. 2013
12. Skeletal Muscle Insulin Sensitivity in T2DM. Purdue University – Center on Aging and the Life Course (CALC). 2013
13. Skeletal Muscle Insulin Sensitivity and Fatty Acid Oxidation in Type 2 diabetes. Purdue University Nutrition Science Conference - Changing the Course: Decoding Epigenetics, the Role of Nutrition and Fitness. 2014
14. Skeletal Muscle Insulin Sensitivity and Fatty Acid Oxidation in Type 2 diabetes. University of North Carolina, Charlotte Department of Kinesiology. 2015
15. Skeletal Muscle Insulin Sensitivity and Fatty Acid Oxidation in Type 2 diabetes. Indiana University School of Medicine Department of Cellular & Integrative Physiology. 2015
16. Skeletal muscle exosome responses to acute and chronic exercise. Invited Speaker. Experimental Biology in Symposium: The impact of exosomes on muscle atrophy, hypertrophy, and myogenesis. Chicago, IL 2017
17. Best Practices for Kinesiology Internships and Practicums: Clinical KINE, Public Health, Athletic Training. American Kinesiology Association Leadership Conference. Denver CO 2018
18. Setting Students up for Success: Advancements in Exercise Science Curriculum. American Kinesiology Association Leadership Conference. Denver CO 2018.
19. VasoMyo Crosstalk (VMC) in Health and Disease. Colorado State University. 2021
20. Exosomes Facilitate Crosstalk Between Skeletal Muscle and Endothelial Cells. ACSM Annual Meeting. 2021.

21. Symposium organizer - Exosomes and Skeletal Muscle Intercellular Communications. ACSM Annual Meeting. 2021.
22. Vasomyo (VMC) crosstalk in health and disease. East Stroudsburg University. 2021
23. Vasomyo (VMC) crosstalk in health and disease. Iowa State University. 2022

Funded Extramural and Intramural Grants

1. Indiana University School of Health, Physical Education, and Recreation Graduate Research Student Award. Ventilation's role in the decline in $\dot{V}O_{2MAX}$ and Sa_{O_2} in acute hypoxic exercise. PI: TP Gavin. 1994. $1,000.
2. Indiana University School of Health, Physical Education, and Recreation Student Travel Award. PI: TP Gavin. 1995. $100.
3. Indiana University Graduate School Student Research Award. The effect of exercise modality on exercise-induced hypoxemia. PI: TP Gavin. 1995. $1,000.
4. Indiana University School of Health, Physical Education, and Recreation Student Travel Award. PI: TP Gavin. 1996. $100.
5. American College of Sports Medicine (ACSM). Potential mechanisms for exercise-induced hypoxemia (EIH). PI: TP Gavin. 1996. $2,000.
6. National Institutes of Health, National Research Service Award. Exercise induced angiogenesis. PI: TP Gavin. 1996-1999. $73,200.
7. State of California, Tobacco-Related Disease Research Program. New Investigator Award. Skeletal muscle structure and function in COPD. PI: TP Gavin. 1999-2003. $225,000.
8. North Carolina Institute of Nutrition. Effect of obesity on skeletal muscle VEGF expression. Co-P.I. TP Gavin. 2001. $9,000.
9. National Institutes of Health - R21. Exercise, nutritive muscle blood flow and eNOS in aging. PI: RC Hickner; co-I: TP Gavin. 2001. $209,250.
10. East Carolina University Faculty Senate Grant. One year. Regulation of vascular endothelial growth factor expression (VEGF) by ethanol in skeletal muscle myotubes: potential mechanism for the cardiovascular protective effects of ethanol? PI: TP Gavin. 2001. $17,000.
11. North Carolina Institute of Nutrition. Effect of ethanol on skeletal muscle VEGF expression *in vivo*: Dose response in humans. Co-P.I. TP Gavin. 2002. $8,000.
12. National Institutes of Health – R15. Age, VEGF, and skeletal muscle capillarization in humans. PI: TP Gavin. 2003-2006. $209,500.
13. American Heart Association – Mid-Atlantic States Affiliate. Beginning Grant-in-Aid. Age, exercise training, and skeletal muscle capillarization in humans. PI: TP Gavin. 2004-2007. $132,000.
14. Gatorade Sports. AMPK regulation of skeletal muscle capillarization. PI: KA Zwetsloot; co-I: TP Gavin. 2005-2006. $3,000.
15. East Carolina University Research Development Grant. Bariatric surgery and diabetes. PI: TP Gavin. 2007-2008. $35,000.
16. East Carolina University Research Development Grant. Effect of bariatric surgery on pancreatic insulin. PI: M Dar; co-I: TP Gavin. 2008-2009. $35,000.
17. East Carolina University Research Development Grant. Effect of Cox-Maze Surgery to Treat Atrial Fibrillation. PI: E Rodriguez; co-I: TP Gavin. 2008-2009. $35,000.
18. National Institutes of Health – R01. Linking Mitochondrial Bioenergetics to Muscle Insulin Sensitivity. PI: PD Neufer; co-I: TP Gavin. 2009-2014. $1,781,250.
19. East Carolina Diabetes and Obesity Institute. Duration of type 2 diabetes and skeletal muscle mitochondrial function. PI: TP Gavin. 2010-2012. $17,000.

20. Purdue University Laboratory & University Core Facility Research Equipment Program. Rodent exercise physiology unit. Multiple PI: TP Gavin and S Kuang. 2014-15. $30,000.
21. National Institutes of Health - UL1TR001108 - Indiana Clinical and Translational Science Institute – Human Health and Biomedical Technologies Project Development Team (PDT). PI: A Shekar; co-I: TP Gavin. 2013-18. $22,201,020.
22. National Institutes of Health – K08. Mechanisms of Interventions to Ameliorate Sarcopenia in Chronic Kidney Disease. PI: K Avin; co-Mentor: TP Gavin (no official effort). 2016-2021. $674,816.
23. Centers for Disease Control. Programs to Reduce Obesity in High Obesity Areas to Boost Prevention. PI: TP Gavin. 2016-2018. $1.15 million.
24. Gatorade Sports Science Institute. PI: B Roseguini; co-I: TP Gavin. Accelerating postexercise muscle glycogen resynthesis in humans: impact of intermittent pneumatic compression and heat therapy. 2018-2019. $125,599.
25. National Institutes of Health - UL1TR002529 - Indiana Clinical and Translational Science Institute – Human Health and Biomedical Technologies Project Development Team (PDT). PI: A Shekhar/S Moe/S Wiehe; co-I: TP Gavin. 2018-23. $33,000,000.
26. Purdue University Laboratory & University Core Facility Research Equipment Program. Oroboros Respirometer. Multiple PI: TP Gavin. 2019-2020. $65,000.
27. American Heart Association – Innovative Project Award. Skeletal muscle microvascular dysfunction in obesity. PI: TP Gavin. 2021-2022. $200,000.
28. Indiana CTSI – Core Pilot. Aging and skeletal muscle exosome miRNA-seq. PI: TP Gavin. 2021-2022. $10,000.
29. National Institutes of Health – F31. Mechanisms of secretion and uptake of small extracellular vesicles (sEVs) in non-small cell lung cancer (NSCLC). PI: Z Soto-Vargas; co-Mentor: TP Gavin (no official effort). 2021-2024. $132,132.

<u>Professional Teaching Experience</u>

1. Indiana University
   a. Invited lectures in Cardiopulmonary Physiology (P609) – Regulation of Stroke Volume. Department of Kinesiology, School of HPER. 1995
   b. Invited lectures in Exercise Physiology (P409) – Regulation and control of skeletal muscle structure and function. Department of Kinesiology, School of HPER. 1994-1996
   c. Exercise Physiology Laboratory. Department of Kinesiology, School of HPER. 1992-1996
   d. Various activity classes. Department of Kinesiology, School of HPER. 1991-1996
2. University of California, San Diego
   a. Discussion section leader Respiratory Physiology in Medical Physiology. Department of Medicine, School of Medicine. 1997-2000.
   b. Invited lectures in Mammalian Physiology – Introduction to Exercise Physiology, Department of Biology, College of Arts and Sciences. 1999.
   c. Invited lectures in Medical Bioengineering – Gas Exchange and Control of Breathing, Department of Bioengineering, School of Engineering. 1999-2000.
3. East Carolina University
   a. Cardiopulmonary Physiology (EXSS 6208). Department of Kinesiology, College of Health and Human Performance. 2000-2012.
   b. Exercise Physiology (EXSS 3805). Department of Kinesiology, College of Health and Human Performance. 2001, 2003, 2005-2012.
   c. Pedagogy in Bioenergetics (EXSS 8310) – 2003-2012.

d. Seminar in Bioenergetics (EXSS 7335). Department of Kinesiology, College of Health and Human Performance. 2003, 2005, 2009
e. Invited lectures in Translational Physiology (PHYS 7705) – Consequences of COPD on skeletal muscle structure and function. Department of Physiology, Brody School of Medicine. 2003, 2005
f. Invited lecture in Muscle Physiology (EXSS 7220) – Skeletal muscle capillarization. Department of Kinesiology, College of Health and Human Performance. 2004-2012.
g. Invited lecture to Sports Medicine Fellows – Cardiopulmonary limitations to exercise tolerance. Department of Family Medicine, Brody School of Medicine. 2005-2012.
h. Invited lecture in Introduction to Research (BIOL 6880) – Skeletal muscle capillarization. Department of Biology, College of Arts and Science. 2005
i. Invited lecture in Physical Activity and Aging (EXSS 5800) – Aging and the cardiovascular and pulmonary systems. Department of Kinesiology, College of Health and Human Performance. 2006
j. Invited lecture in Physical Activity and Disease Prevention (EXSS 2020) – Cardiovascular Disease. Department of Kinesiology, College of Health and Human Performance. 2006-2009
k. Invited lecture in Introduction to Kinesiology (EXSS 2000) - How exercise science has helped enhance sport performance. Department of Kinesiology, College of Health and Human Performance. 2007-2010

4. Purdue University
   a. Exercise Physiology I (HK 36800). Department of Health and Kinesiology. College of Health and Human Sciences. 2013.
   b. Cardiopulmonary Physiology (HK 59000). Department of Health and Kinesiology. College of Health and Human Sciences. 2014-16.
   c. Exercise Physiology Seminar (HK 66800). Department of Health and Kinesiology. College of Health and Human Sciences. 2013, 2015.
   d. Invited lecture in Doctoral Seminar (HK 60200) – Exercise Physiology. Aging and the cardiovascular and pulmonary systems. Department of Health and Kinesiology. College of Health and Human Sciences. 2013-Present.
   e. Doctoral Seminar (HK 60200). Department of Health and Kinesiology. College of Health and Human Sciences. 2018.
   f. Exercise as Medicine (HK 49000EM/HK 41500). Department of Health and Kinesiology. College of Health and Human Sciences. 2020-present.

<u>Postdoctoral Scholar Mentorship</u>

1. Yaohui Nie. Exosomes and skeletal muscle capillarization. 2013-2017.

<u>Doctoral Dissertation Mentorship</u>

1. Kevin Zwetsloot. Effect of AMP kinase on vascular endothelial growth factor expression in skeletal muscle. Defended 2006.
2. Melissa Reed. Mechanisms of diabetes reversal following bariatric surgery. Co-mentor with G. Lynis Dohm, PhD. Defended 2011.
   - Dr. Reed was the recipient of an American Kinesiology Writing Award in 2012
3. Ron Garner. Regulation of skeletal muscle exosomes. Defended 2018.
4. Brian Sullivan. Obesity and skeletal muscle growth and repair. Defended 2021.
5. Chris Kargl. Skeletal muscle and endothelial cell crosstalk in aging. Defended 2022.

6. Lundon Burton. Microvascular dysfunction in obesity. In progress.

Master's Thesis Mentorship

1. Chris Robinson. Time course of the vascular endothelial growth factor mRNA response to acute systemic exercise. Defended 2002.
2. Raymond Kraus. Plasma vascular endothelial growth factor response to exercise in highly trained and sedentary males. Defended 2003.
3. Howard Stallings, III. Effect of obesity on skeletal muscle VEGF expression. Defended 2004.
4. Andrea Croley. Effect of age on skeletal muscle VEGF expression in women. Defended 2004.
5. Rebecca Ruster. Effect of age on interstitial VEGF at rest and during acute exercise. Defended 2005.
6. Nicholas Ryan. Effect of age on skeletal muscle VEGF expression in men. Defended 2006.
7. Mike Davanzo. Effect of calcineurin on skeletal muscle capillarization. Defended 2007.
8. Ruben Sloan. Effect of duodenal-jejunal bypass on skeletal muscle insulin sensitivity. Defended 2009.
9. Lindsay Stagner. Gender differences in aerobic and work capacity during plantar flexion exercise. Defended 2009.
10. Leena Patel. Effect of Cox-Maze surgery on exercise capacity in patients with atrial fibrillation. Defended 2009.
11. Eric Lukosius. Effect of duodenal-jejunal bypass on the incretin response to glucose. Defended 2011.
12. Christina Amato. Role of food restriction and weight loss on the reversal of skeletal muscle insulin resistance following bariatric surgery in type 2 diabetes. Defended 2011.
13. Jacob Ernst. Duration of type 2 diabetes and insulin sensitivity *in vivo*. Defended 2012.
14. Sarah Kehe. Age and gender related differences in skeletal muscle blood flow and function. Defended 2012.
15. Jessica Solfest. Effect of acute aerobic and resistance exercise on skeletal muscle enzyme activity. Defended 2015.
16. Jessica Weiss. Effect of resistance exercise on skeletal muscle angiogenic growth factor expression in lean and obese. Defended 2016.
17. Sheelagh Evans. Effects of concurrent exercise on inflammatory markers in lean and obese. Defended 2017.
18. Brian Sullivan. Effects of obesity on the skeletal muscle response to acute resistance exercise. Defended 2017.
19. Chris Kargl. Skeletal muscle and endothelial cell crosstalk. Defended 2018.
20. Zach Hettinger. Senescence and human skeletal muscle. Defended 2018.
21. Derek Middleton. Regulation of skeletal muscle exosomes by PGC-1α. Defended 2020.
22. Ivan Alonso. Skeletal muscle oxidative stress and endothelial cell dysfunction. In Progress.
23. Linda Adeyemo. Endothelial cell oxidative stress and skeletal muscle dysfunction. In Progress.

Master's Cumulative Research Project Mentorship

1. James Drew. Effect of acute resistance exercise on skeletal muscle VEGF expression. Completed 2006.
2. Chris Kubik. Effect of acute resistance exercise on plasma VEGF expression. Completed 2006.
3. Hadley Peacock. Role of food restriction and weight loss on the reversal of skeletal muscle insulin resistance following bariatric surgery in obesity. Completed 2011.

4. Shane Mikesky. Blood Restriction Training: A Review of KAATSU. Completed 2016.

Service on Doctoral Dissertation Committee

1. Raymond Kraus. The relationship between skeletal muscle inducible nitric oxide synthase and whole-body insulin sensitivity in humans. Defended 2007.
2. Christopher Westerkamp. Role of 5'-AMP-activated protein kinase in skeletal muscle hypertrophy with age and overload. Defended 2007.
3. Elizabeth Fontenot. Effect of inherent running capacity and diet on the vascular response to ischemia. Defended 2009.
4. Molishree Joshi. The role of SDF-1α as a vasculogenic chemokine and endothelium-associated cell adhesion molecule for the recruitment of bone marrow-derived progenitor cells to developing tumors. Defended 2010.
5. Emily Johnson. Regulation of lipolysis by perilipin: Influence of obesity and exercise training. Defended 2010.
6. Akua Amankwaah. Dietary macronutrient intake and changes in body composition: impact on indices of cardio-metabolic health in overweight/obese adults. Defended 2017.
7. Josh Hudson. Effects of within-day protein distribution on changes in plasma amino acid concentrations and body compositions. Defended 2018.
8. Kyoung Rae Kim. Impact of heat therapy on skeletal muscle structure and function. Defended 2019.
9. Shivam Patel. Diabetes, advanced glycation, and tendinopathy. Defended 2020.
10. Jacob Monroe. Leg heat therapy to improve walking tolerance and vascular function in patients with symptomatic peripheral arterial disease. Defended 2021.
11. Michael Belbis. Skeletal muscle microvascular (dys)function: Mechanisms and therapeutics. Defended 2023.
12. Zulaida Soto Vargas. Unravelling the impact of oncogenic signaling in extracellular vesicle mediated tumorigenesis and immunesuppression in non-small cell lung cancer. Defended 2023.
13. Kun Ho Kim. Function of protein arginine methyltransferase 5 in skeletal muscle development and homeostasis. Defended 2023.
14. Humna Hassan. Ability of cancer-derived exosomal RNA to modulate physiological changes in the recipient non-tumorigenic cells. In progress.
15. Jingjuan Chen. Investigations of the expression and function of Fam210a in MuSCs and muscle regeneration. In progress.
16. Jiamin Qiu. Fam210a controls brown fat thermogenesis by regulating mitochondrial remodeling via OPA1 cleavage. In progress.

Service on Master's Thesis Committee

1. Todd Brown. The effects of long duration concentric or eccentric contraction on neuromuscular aspects in young males. Defended 2001.
2. Kevin Harrison. Nitric oxide-induced vasodilatation in trained and untrained older individuals. Defended 2001.
3. Jovita Jolla. Aging involves a reorganization of neuromuscular strategies used during activities of daily living. Defended 2002.
4. James McGehee. Validity of popular methods of estimating lactate threshold currently used by endurance athletes. Defended 2002.
5. Chris Westerkamp. Skeletal myoblast and fibroblast proliferation with overload and angiotensin II. Defended 2003.

6. Sarah George. Role of nitric oxide in VEGF expression and capillary proliferation in overload-induced skeletal muscle hypertrophy. Defended 2003.
7. Christy Doty. The effects of acute resistance exercise on skeletal muscle growth factor concentration, fibroblasts proliferation, and satellite cell proliferation in humans. Defended 2005.
8. Jonathan Gomez. Increased Antagonist Coactivation-Related Hamstring Torque Reduces Maximal Knee Extension Torque in Healthy Old Adults. Defended 2010.
9. India Hope Tharington. Skeletal Muscle Forkhead Box 3A (FOXO3A) Response to Acute Resistance Exercise in Young and Old Men and Women: Relationship to Muscle Glycogen Content and 5'-AMP-Activated Protein Kinase (AMPK) Activity. Defended 2010.
10. Daniel Lark. A single dose of metformin improves whole body insulin sensitivity and alters cellular redox state in skeletal muscle of Zucker fa/fa rats. Defended 2010.
11. Eric Choplin. Apoptotic Marker Response to Acute Resistance Exercise in Young and Old Men and Women: Relationship to Muscle Glycogen Content and 5'-AMP-Activated Protein Kinase (AMPK) Activity. Defended 2011.
12. Billy Mixon. The Effects of Leucine Supplementation on Markers of Protein Degradation and Muscle Mass in Overloaded Young and Aged Rat Skeletal Muscle. Defended 2011.
13. Kelly Swain. A Comparison in Mood States of Distance and Sprint Swimmers. Defended 2011.
14. Ashley Colón. The Effects of Aerobic Exercise Training in Children of Lean and Extremely Obese Biological Mothers. Defended 2011.
15. Rebecca Smith. Will Participation in Pedal@Work, a worksite intervention program, reduce sedentary time and improve cardiometabolic health? Defended 2012.
16. Anna Kate Bires. Training and endothelial function in upper and lower limbs. Defended 2013.
17. Hannah Boeh. Validating Indiana's supplemental nutrition assistance program education (SNAP-ED) medium term survey using NIH NCI ASA 24 dietary recalls. Defended 2015.
18. Jennifer Hockemeyer. Estrogen, muscle soreness, and the repeated bout effect. Defended 2015.
19. Alisha Kuhlenhoelter. Acute impact of a single session of thermotherapy on the expression of angiogenic mediators in human skeletal muscle. Defended 2016.
20. Boyhun Ro. Heat therapy in muscle recovery from endurance exercise. Defended 2021.

<u>Physician Fellow, Medical Student, and Undergraduate Student Research Mentorship</u>

2000-2001	Bob Yeager, Justin England, Andrew Perry
2001-2002	Edria Kinlaw, Justin Brown, Sarah George, Paige Clark, Robert Grove, Margaret Hart
2002-2003	Jason Brancoti, Adam Padgett, Josh Riggsbee, Tim Carlson, Aaron Milligan, Shawn Trutna
2003-2004	Rebecca Moore, Adam Rotchstein
2004-2005	Alexis Barnett
2005-2006	Matt Bodenheimer, Priscilla Bryan, Krystel Pabey, Sam Pittman, Brandee Winkler, Cicely Parker, Heather Burleson
2006-2007	Ruben Sloan, Kushal Parikh (University of Notre Dame)
2007-2008	Graylyn Bauguess, Kushal Parikh (University of Notre Dame), Jacqueline Carter
2008-2009	Robert McKernie
2013-2014	Alisha Kuhlenhoelter, Rachel Wichlinski
2015-2016	Mandi Kulbersh, Alanna Fennimore, Caroline Baldwin
2016-2017	Andy Hoselton, Cathal Drohan (Dublin City University), Zifong Liu, Amy Poynter
2017-2018	Katherine Bender, Derrick Middleton, Ben Thornton, Sam Zike

2018-2019	Brandon Braden, Lis Angelica Quevedo Blandon (National University of Columbia), Joci Alejandro Mena Carvajalino (National University of Columbia), Ivan Andres Alonso Bobadilla (National University of Columbia)
2019-2020	Logan Barber, Allison Eavey, Joshua Leisure, Kelly Tucker
2020-2021	Allison Ellis, Joshua Leisure, Deborah Shera, Ryan Tucker, Autumn Yang
2021-2022	Salaam Batarseh, Allison Ellis, Victoria Harrison, Joshua Middleton, Deborah Shera, Ryan Tucker, Andrew York
2022-2023	Salaam Batarseh, Allison Ellis, Victoria Harrison, Joshua Middleton, Ricardo Pardo (National University of Columbia) Deborah Shera, Andrew York
2023-24	Josh Middleton

Service to University

2001-2004	ECU Teaching Grants Committee, Chair 2003-2004, Vice Chair 2002-2003
2001	Motor Learning Search Committee
2002-2008	Consultant – L.T. Walker International Human Performance Center
2004-2005	EXSS Personnel Committee
2005-2006	Exercise and Nutrition Search Committee, Chair
2006-2007	EXSS Personnel Committee
	College of HHP Strategic Planning Committee
	EXSS Facility Use Committee
	EXSS Retreat Committee
	Athletic Training Search Committee, Outside Representative
	EXSS New Faculty Mentor – Courtney Gaine
2007-2012	EXSS New Faculty Mentor – Melanie Sartore
2007	HPL Strategic Planning Committee
2007-2009	EXSS Personnel Committee, Chair
2007-2010	University Budget Committee, Chair 2008-2010, Secretary 2007-2008.
2008-2010	Exercise Physiology Concentration Director of MS degree in EXSS
2009-2011	ECU Budget Task Force Committee
	ECU Budget Task Force Committee – Revenue Subcommittee
	ECU Tuition and Fee Committee
	ECU Tuition and Fee Committee – Tuition Subcommittee
	Budget Advisory Council to the Chancellor
2010	5 yr evaluation of Kevin Seitz, Vice Chancellor for Administration and Finance
2010	Chancellor's Faculty Salary Study Group
2011	EXSS Retreat Committee
2011-2012	Judge ECU Research and Creative Activity Week
2012-Present	College of Health and Human Sciences Leadership Team
2013-Present	Judge Purdue Sigma Xi Research Meeting
2014	Continuing Lecturer in Nutrition, Fitness, and Health Search Committee, Member
2014	Nutrition and Exercise Strategic Planning Committee
2015	Continuing Lecturer in Nutrition, Fitness, and Health Search Committee, Member
2015-16	Indiana CTSI, Purdue Clinical Core Director Search Committee, Member
2015-16	Healthcare IT Master's degree development committee
2016-17	Department of Psychology Head Search Committee, Chair
2016-Present	Mentor, Purdue University Horizon's Program for First Generation Students

2019-20	Department of Human Development and Family Studies Head Search Committee, Chair
2020-21	Muscle Biologist in Department of Animal Sciences Search Committee, Member
2021-22	Mentor, Purdue University Insight Program

Service to Profession

2002-2004	Consultant - President's Council on Physical Fitness and Sports
2004	Mentored American Physiological Society Minority Fellowship Award Winner (Karma Rabon-Stith, Ph.D. post-doctoral fellow, University of Maryland, College Park) at the Integrative Biology of Exercise Meeting, Austin, TX
2007	American Physiological Society High School Teacher Guide at 2007 EB Meeting
2007	American Physiological Society Careers Presenter at AB Aycock Middle School, Greenville, NC
2008	Mentored American Physiological Society Minority Fellowship Award Winner (Trudy Moore-Harrison, Ph.D. post-doctoral fellow, University of North Carolina, Greensboro) at the Integrative Biology of Exercise Meeting, Hilton Head, SC
2012	Invited symposium chair Southeast American College of Sports Medicine
2013-2015	American Kinesiology Association Future Directions Committee
2013-Present	Reviewer Indiana Clinical & Translational Sciences Institute Project Development grants
2013-Present	Indiana Clinical & Translational Sciences Institute Bone and Body Composition Core Advisory Member
2013	Chair of External Review, Graduate Program in the Department of Kinesiology, University of Wisconsin – Madison.
2013-2014	External Referee Tenure and Promotion – 2 cases
2014-2015	External Referee Tenure and Promotion – 4 cases
2014-Present	American College of Sports Medicine Health and Science Policy Committee
2015-Present	American Kinesiology Association Classification of Instructional Programs (CIP) Task Force
2015-Present	Advisory Board Member, Sport Sciences for Health
2015-2016	External Referee Tenure and Promotion – 3 cases
2016-2017	External Referee Tenure and Promotion – 4 cases
2017	External Review, Department of Kinesiology, Temple University
2017-Present	NIH Common Fund Molecular Transducers of Physical Activity (MoTrPAC) Data Safety Monitoring Board (DSMB)
2017-2018	External Referee Tenure and Promotion – 4 cases
2018-2021	Board of Directors, American Kinesiology Association
2018-Present	Steering Committee, American Kinesiology Association
2018-Present	Publications Committee, American Kinesiology Association, Chair 2019-Present
2018	External Review, Department of Kinesiology and Sport Management, University of South Dakota
2018	External Review, Department of Human Foods, Nutrition, Exercise, Virginia Polytechnic Institute and State University
2018-Present	Mentor, American College of Sports Medicine, Leadership and Diversity Training Program (LTDP)
2018-2019	External Referee Tenure and Promotion – 3 cases

2019-2020	Planning Committee for the 2020 ACSM Basic Science World Congress (BSWC) on Exercise in Regenerative Medicine
2019-2020	External Referee Tenure and Promotion – 5 cases
2020-Present	Website Committee, American Kinesiology Association, Chair
2020-Present	Leadership Institute Mentor, American Kinesiology Association
2020-Present	Strategic Planning Committee, American College of Sports Medicine
2020-Present	Committee on Awards, National Academy of Kinesiology, Chair
2020-2021	External Referee Tenure and Promotion – 4 cases
2021	External Review, College of Health Sciences, University of Memphis
2021-Present	Mentor, American College of Sports Medicine, Mentoring Women to Fellowship Program
2021-2022	External Referee Tenure and Promotion – 7 cases
2022-2023	External Referee Tenure and Promotion – 5 cases
2023	Leadership Institute co-Director, American Kinesiology Association

Service to Community

1998-2000	Mentor, San Diego Unified School District, Pacific Beach Middle School
2000-2002	President East Carolina Velo Cycling Club
2005-2010	President Greenville Racing Team
2006-2007	Scientific Advisor - Capri Foundation Cycling Team
2007-2010	Race Promoter – Greenville Bicycle Race Weekend
2008-2009	Greater Greenville Bicycle Task Force
2009-2011	Scientific Advisor – Mock Orange Racing Team
2013	Volunteer, Food Finders Food Bank
2017	Invited Speaker, Lafayette Daybreak Rotary Club
2020-2022	Board of Directors, Wabash River Cycling Club