

CURRICULUM VITAE

Michael P. Massett, Ph.D.

PERSONAL INFORMATION

Current Position:

Associate Professor
Department of Kinesiology and Sport Management
Texas Tech University
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EDUCATION

Syracuse University	B.S.	05/15/1988	Physical Education
University of Arizona	M.S.	05/11/1991	Exercise and Sport Sciences
University of Arizona (transferred to the University of Iowa in good academic standing)	-----	1993	Physiological Sciences
University of Iowa Doctoral Dissertation: <i>The effect of heating on vascular reactivity in the rat.</i> Advisor: Kevin C. Kregel, Ph.D.	Ph.D.	08/01/1997	Exercise Science

POSTDOCTORAL TRAINING

1997 - 2000	Department of Physiology New York Medical College Supervisor: Gabor Kaley, Ph.D.
2000 - 2001	Center for Cardiovascular Research University of Rochester School of Medicine & Dentistry Supervisor: Bradford C. Berk, M.D., Ph.D.

FELLOWSHIP AWARDS

NIH National Research Service Award - Institutional Predoctoral Traineeship, Physiological Sciences Graduate Program, University of Arizona, 1991 - 1993.

NIA National Research Service Award - Institutional Predoctoral Traineeship, Center on Aging, University of Iowa, 1994 - 1996.

NIH National Research Service Award - Individual Postdoctoral Fellowship, 1998 - 2001.

ACADEMIC AND PROFESSIONAL APPOINTMENTS

1988 - 1990	Graduate Teaching Assistant, Physical Education Courses, Department of Exercise and Sport Sciences, University of Arizona
1989 - 1991	Graduate Research Assistant, Body Composition Laboratory, Department of Exercise and Sport Sciences, University of Arizona
1992	Graduate Teaching Assistant, Exercise Physiology Laboratory, Department of Exercise and Sport Sciences, University of Arizona
1993 - 1994	Graduate Teaching Assistant, Department of Exercise Science, University of Iowa
1994 - 1997	Graduate Research Assistant, Department of Exercise Science, University of Iowa
2001 - 2002	Senior Instructor, Center for Cardiovascular Research, University of Rochester Medical Center
2002 - 2007	Research Assistant Professor, Center for Cardiovascular Research, University of Rochester Medical Center
2007 - 2013	Assistant Professor, Department of Health & Kinesiology, Texas A&M University
2007 - 2019	Investigator, Cardiovascular Research Institute (CVRI), College of Medicine, Texas A&M Health Science Center
2007 - 2019	Member, Sydney and J.L. Huffines Institute for Sports Medicine and Human Performance, Texas A&M University
2013 - 2019	Associate Professor, Department of Health & Kinesiology, Texas A&M University
2018 - 2019	Assistant Chair, Kinesiology Division, Department of Health & Kinesiology, Texas A&M University (Primarily responsible for faculty and GA teaching assignments and liaison with undergraduate student advisors regarding curriculum)
2019 - present	Associate Professor, Department of Kinesiology and Sport Management, Texas Tech University
2021 - 2024	Coordinator, Exercise Physiology Ph.D. Program, Department of Kinesiology and Sport Management, Texas Tech University

PROFESSIONAL AFFILIATIONS

American College of Sports Medicine, 2012 - present
American Physiological Society, 1993 - present
American Heart Association, 2002 - present
The Microcirculatory Society, 2000 – 2015
Rio Grande Physiological Society, 2022 - present

HONORS OR AWARDS

- Syracuse University Scholarship, 1984 - 1988
- Distinguished Freshman Scholarship, Syracuse University, 1984 - 1988
- Phi Epsilon Kappa, Pi Epsilon Kappa, Syracuse University, 1988
- Gatorade Student Research Award, The Quaker Oats Company, 1991.
- C. H. McCloy Scholarship, Department of Exercise Science, University of Iowa, 1995.
- Louis E. Alley Graduate Student Award, Department of Exercise Science, University of Iowa, 1996.

- Experimental Biology 2000 Young Investigator Travel Award from the Cardiovascular Section of the American Physiological Society.
- Experimental Biology 2000 Recognition Award for Meritorious Research by a Young Investigator, Cardiovascular Section of the American Physiological Society.
- Research Career Enhancement Award, the American Physiological Society, 2004.
- Teacher of the Year in Kinesiology, Department of Health and Kinesiology, Texas A&M University, 2015
- Distinguished Service Award, Physiological Genomics Group, American Physiological Society, 2017
- 2022 Assessment Innovation Grant Award (Lumpkin, Blinch, Gonzales, Massett)

Professional Development Workshops and Support

2008	Participant, NHLBI Genomics and Proteomics Hands On Workshop, Denver, CO,
2011	Participant, The Huffines Institute/Grant Central grant writers' workshop
2015	Grant Proposal-Writing Workshop, Texas A&M and Grant Writers' Seminars & Workshops
2024	Faculty and Staff Wellbeing & Success Mini-Grant, TTU Office of the Provost, funding (\$1,975) to attend a professional conference
2024	Open Access Publication Initiative - Fall 2024/Spring 2025 (\$1,000) to help defray the costs of open access publication fees.
2024-25	Fellow, Institute of Faculty Excellence, TTU Office of Faculty Success, TLPDC

Current Research Support

26AIREA1575918	01/01/26 – 12/31/27
Institutional Research Enhancement Award (AIREA) American Heart Association Role of exercise training in preventing endothelial and mitochondrial dysfunction in lupus, https://doi.org/10.58275/AHA.26AIREA1575918.pc.gr.240199 The objective of this proposal is to determine the efficacy of exercise training to enhance endothelial and mitochondrial function in lupus-prone mice. Role: PI	

Completed Research Support

Arts & Sciences Faculty Research Advancement Program (RAP) Role: PI	12/05/24 – 08/01/25
Research Assistance Program, Texas Tech University Arterial dysfunction in lupus: benefits of exercise Role: PI	09/01/24 – 08/31/25
Doctoral Dissertation Completion Fellowship (H. Kim) Graduate School, Texas Tech University Role: Academic advisor to Fellow Hyoseon Kim	09/01/23 - 05/31/24
Start-up Funds, Texas Tech University Role: PI	09/01/19-08/31/23

AHA Transformational Project Award (TPA) (Trache, A., PI) 7/1/18 – 5/30/22
Cytoskeleton remodeling regulates contractile function and mechanosensing in vascular smooth muscle.

Role: Collaborator

T3: Texas A&M Triads for Transformation (Masset, PI) 4/1/18 – 5/30/21
Influence of genetic background on vascular function

Role: PI

F&A Designated Funds, Texas A&M University (Masset, PI) 12/17/2012 – 08/16/2019
Research Support Funds

TIAS Pilot Project (Masset, PI) 11/01/14 – 09/01/18

Texas Institute of Advanced Studies, Texas A&M (TIAS Fellow C. Bouchard)

Role: PI

NIH/NHLBI 1R01 HL085918-01 (**Masset**, PI) (04/01/07 - 02/28/15)

Genetic basis for exercise training responses

Role: PI

William Townsend Porter Predoctoral Fellowship Award (09/01/12 - 08/31/14)

The American Physiological Society

Role: PI (Academic advisor to Fellow: J. J. Avila)

Faculty Research Mini-Grant (**Masset**, PI) (05/01/09 - 12/31/11)

Sydney and J.L. Huffines Institute for Sports Medicine and Human Performance, Texas A&M University

Renin angiotensin system and exercise

Role: PI

01300500T (**Masset**, PI) 07/1/01 - 06/31/04

Scientist Development Grant, American Heart Association

Renin-angiotensin system and exercise

Role: PI

F32 HL10111-03 (**Masset**, PI) 07/01/98 - 06/30/01

NIH/NHLBI, National Research Service Award, Individual Fellowship Award

Exercise and metabolic control of vascular tone

Role: PI

PUBLICATIONS

Book Chapters:

Avila, J. J., S. M. Courtney, and **M. P. Massett**. Heritability of endurance traits from animal research models. In: *Routledge Handbook of Sport and Exercise Systems Genetics*. Edited by J. Timothy Lightfoot, Monica Hubal, and Stephen Roth. Abingdon, Oxon ; New York, NY : Routledge, 2019.: Routledge. doi:10.4324/9781315146287.

Original (scientific) articles:

1. Going, S. B., **M. P. Massett**, M. C. Hall, L. A. Bare, P. A. Root, D. P. Williams, and T. G. Lohman. Detection of small changes in body composition by dual energy x-ray absorptiometry. *Am. J. Clin. Nutr.* 57: 845-850, 1993.
2. Williams, D. P., S. B. Going, **M. P. Massett**, T. G. Lohman, L. A. Bare, and M. J. Hewitt. Aqueous and mineral fractions of the fat-free body and their relation to body fat estimates in men and women aged 49-82 years. *Basic Life Sci.* 109-113, 1993.
3. **Masset, M. P.**, D. G. Johnson, and K. C. Kregel. The cardiovascular and sympatho-adrenal responses to heat stress following water deprivation in rats. *Am. J. Physiol.* 270 (*Regulatory Integrative Comp. Physiol.* 39): R652-R659, 1996.
4. Stauss, H. M., D. A. Morgan, K. E. Anderson, **M. P. Massett**, and K. C. Kregel. Aging is not accompanied by sympathetic hyperresponsiveness to air-jet stress. *Am. J. Physiol.* 271 (*Heart Circ. Physiol.* 40): H768-H775, 1996.
5. Stauss, H. M., D. A. Morgan, K. E. Anderson, **M. P. Massett**, and K. C. Kregel. Modulation of baroreflex sensitivity and spectral power of blood pressure by heat stress and aging. *Am. J. Physiol.* 272 (*Heart Circ. Physiol.* 41): H776-H784, 1997.
6. Kregel, K. C., M. J. Kenney, **M. P. Massett**, D. A. Morgan, and S. J. Lewis. Role of nitrosyl factors in the hemodynamic adjustments to heat stress in the rat. *Am. J. Physiol.* 273 (*Heart Circ. Physiol.* 42): H1537-H1543, 1997.
7. **Masset, M. P.**, S. J. Lewis, J. N. Bates, and K. C. Kregel. Effect of heating on vascular reactivity in rat mesenteric arteries. *J. Appl. Physiol.* 85: 701-708, 1998.
8. **Masset, M. P.**, S. J. Lewis, and K. C. Kregel. Effect of heating on the hemodynamic responses to vasoactive agents. *Am. J. Physiol.* 275 (*Regulatory Integrative Comp. Physiol.* 44): R844-R853, 1998.
9. **Masset, M. P.**, S. J. Lewis, J. N. Bates, and K. C. Kregel. Modulation of temperature-induced vascular tone by vasoconstrictor agents. *J. Appl. Physiol.* 86: 963-969, 1999.
10. **Masset, M. P.**, S. J. Lewis, H. M. Stauss, and K. C. Kregel. Vascular reactivity and baroreflex function during hyperthermia in conscious rats. *Am. J. Physiol. Regulatory, Integrative Comp. Physiol.* 279: R1282-R1289, 2000.
11. **Masset, M. P.**, A. Koller, and G. Kaley. Hyperosmolality-induced dilation in rat skeletal muscle arterioles: Endothelial K_{ATP} channels and daily exercise. *J. Appl. Physiol.* 89: 2227-2234, 2000.
12. **Masset, M. P.**, Z. Ungvari, A. Csiszar, G. Kaley, and A. Koller. Differential role of PKC and MAP kinases in myogenic and agonist-induced constriction of skeletal muscle arterioles. *Am. J. Physiol. Heart Circ. Physiol.* 283: H2282-H2287, 2002.
13. Korshunov, V. A., **M. P. Massett**, R. M. Carey, and B. C. Berk. Role of angiotensin converting-enzyme and neutral endopeptidase in flow-dependent remodeling. *J. Vasc. Res.* 41: 148-156, 2004.

14. **Masset, M. P.**, and B. C. Berk. Strain-dependent differences in responses to exercise training in inbred and hybrid mice. *Am. J. Physiol. Regul. Integr. Comp. Physiol.* 288:R1006-R1013, 2005.
15. Barker, T. A., **M. P. Massett**, V. A. Korshunov, A. M. Mohan, A. J. Kennedy, B. C. Berk. AT₂R expression following vascular injury: Differing effects of ACE inhibition and angiotensin receptor blockade. *Hypertension* 48: 942-949, 2006.
16. Woo, C.-H., **M. P. Massett**, T. Shishido, S. Itoh, B. Ding, C. McClain, W. Che, S. R. Vulapalli, C. Yan, J. Abe. ERK5 activation inhibits inflammatory responses via peroxisome proliferator-activated receptor δ (PPAR δ) stimulation in skeletal muscle: Possible involvement in aging. *J. Biol. Chem.* 281: 32164-32174, 2006.
17. Chen, C., V. A. Korshunov, **M. P. Massett**, C. Yan, and B. C. Berk. Impaired vasorelaxation in inbred mice is associated with alterations in both nitric oxide and superoxide pathways. *J. Vasc. Res.* 44:504–512, 2007.
18. Korshunov, V. A., M. Daul, **M. P. Massett**, and B. C. Berk. Axl mediates vascular remodeling in DOCA-salt hypertension. *Hypertension* 50: 1057-1062, 2007.
19. Pang, J., C. Yan, K. Natarajan, M. E. Cavet, **M. P. Massett**, G. Yin, and B. C. Berk. GIT1 mediates HDAC5 activation by angiotensin II in vascular smooth muscle cells. *Arterioscler. Thromb. Vasc. Biol.* 28:892-898, 2008, PMC2735338.
20. Pang, J., R. Hoefen, G. S. Pryhuber, J. Wang, G. Yin, J. R. White, X. Xu, M. R. O'Dell, A. Mohan, **M. P. Massett**, C. Yan, and B. C. Berk. Git1 is required for pulmonary vascular development. *Circulation* 119:1524-1532, 2009, PMC2732662.
21. **Masset, M. P.**, R. Fan, and B. C. Berk. Quantitative trait loci for exercise training responses in FVB/NJ and C57BL/6J mice. *Physiol. Genomics* 40: 15-22, 2009, PMC2807210.
22. Liu, S. Y. F. Lee, S. M. Chou, H. Uno, G. Li, P. Brookes, **M. P. Massett**, Q. Wu, L. Chen, and C. Chang. Mice lacking TR4 nuclear receptor develop mitochondrial myopathy with deficiency in complex I. *Mol. Endocrinol.* 25: 1301-1310, 2011, PMC3146253.
23. Courtney*, S. M., and **M. P. Massett**. Identification of exercise capacity QTL using association mapping in inbred mice. *Physiol. Genomics* 44:948-955, 2012, PMC3472463.
24. Courtney*, S. M., and **M. P. Massett**. The effect of chromosome substitution on intrinsic exercise capacity mice. [v2; ref status: indexed, <http://f1000r.es/3jr>] *F1000Research* 3:9, 2014, doi: 10.12688/f1000research.3-9.v2, PMC4032107.
25. **Masset, M. P.**, J. J. Avila*, and S. K. Kim*. Exercise capacity and response to training quantitative trait loci in a NZW X 129S1 intercross and combined cross analysis of inbred mouse strains. *PLoS One* 10: e0145741, 2015, doi:10.1371/journal.pone.0145741, PMC4692404.
26. Kim*, S. K., J. Avila*, and **M. P. Massett**. Strain survey and genetic analysis of vasoreactivity in mouse aorta. *Physiol Genomics* 48:861–873, 2016, doi:10.1152/physiolgenomics.00054.2016, PMC6223573.

27. Kim*, S. K., and **M. P. Massett**. Genetic regulation of endothelial vasomotor function. *Front. Physiol.* 7:571, 2016, doi: 10.3389/fphys.2016.00571, PMC5122706.
28. Avila*, J.J., S. K. Kim*, and **M. P. Massett**. Differences in exercise capacity and training responses in 24 inbred mouse strains. *Front. Physiol.* 8:974, 2017, doi: 10.3389/fphys.2017.00974, PMC5714923
29. **Masset, M. P.**, S. M. Courtney*, S. K. Kim*, and J. J. Avila*. Contribution of chromosome 14 to exercise capacity and training responses in mice. *Front. Physiol.* 10:1165, 2019, doi: 10.3389/fphys.2019.01165, PMC6753330.
30. Kim*, S. K., J. J. Avila*, and **M. P. Massett**. Interaction of genetic background and exercise training intensity on endothelial function in mouse aorta. *Korean J Physiol Pharmacol* 24:53-68, 2020, DOI: 10.4196/kjpp.2020.24.1.53, PMC694050,.
31. Luttrell, M., Kim, H. *, S. Y. Shin*, D. Holly*, **M. P. Massett**, and C. Woodman. Heterogeneous effect of aging on vasorelaxation responses in large and small arteries. *Physiol Rep.* 8:e14344, 2020, DOI: 10.14814/phy2.14341, PMC6971410.
32. **Masset†, M. P.**, B. Bywaters†, H. Gibbs†, J. Trzeciakowski, S. Padgham, J. Chen, G. Rivera, A. Yeh, D. Milewicz, A. Trache. Loss of smooth muscle α -actin effects on mechanosensing and cell–matrix adhesions. *Exp Biol Med (Maywood)* 245(4):374-384, 2020, DOI: 10.1177/1535370220903012, PMID: 32064918, PMC7370591. † denotes equal contributions
33. Trache, A., **M. P. Massett**, and C. R. Woodman. Vascular smooth muscle stiffness and its role in aging. *Curr Top Membr.* 2020; 86: 217-253. doi.org/10.1016/bs.ctm.2020.08.008. (Peer-reviewed book series, IF: 3.744, SJR: 1.972)
34. Vellers, H.L., **M. P. Massett**, J. J. Avila, S. K. Kim, J. Marzec, J. H. Santos, J. T. Lightfoot, and S. R. Kleeberger. Mitochondrial DNA lesions and copy number are strain dependent in endurance-trained mice. *Physiol Rep.* 8:e14605, 2020, doi.org/10.14814/phy2.14605, PMID: 33190396; PMCID: PMC7666774..
35. **Masset, M. P.**, C. Matejka[§], and H. Kim*, Systematic Review and Meta-Analysis of Exercise Training Protocols for Mice. *Front. Physiol.* 12: 2143, 2021. doi: 10.3389/fphys.2021.782695. PMID: 34950054; PMCID: PMC8691460.
36. Ojha, Krishna Raj†, H. Kim†*, S. Padgham, L. Hopkins, R. J. Zamen, A. Chattopadhyay, G. Han, D. M. Milewicz, **M. P. Massett**, A. Trache. Smooth Muscle-Alpha Actin R149C Pathogenic Variant Downregulates Integrin Recruitment at Cell-Matrix Adhesions and Decreases Cellular Contractility. *Int. J. Mol. Sci.* 24: 9616, 2023, . doi.org/10.3390/ijms24119616. PMID: 37298565; PMCID: PMC10253315. † denotes equal contributions
37. Holly, D. S.*, H. Kim*, C. Woodman, and **M. P. Massett**. Genetic background influences arterial vasomotor function in male and female mice. *Physiol Rep.* 11:e15824, 2023, doi.org/10.14814/phy2.15824. PMID: 37771071; PMCID: PMC10539628.
38. Kim,* H. and **M. P. Massett**. Effect of rapamycin on endothelial function in systemic lupus erythematosus. *Front Physiol.* Aug 21;15:1446836, 2024. doi: 10.3389/fphys.2024.1446836.

PMID: 39234308; PMCID: PMC11372898.

39. Kim,* H. and **M. P. Massett**. Effect of spermidine on endothelial function in systemic lupus erythematosus mice. *Int J Mol Sci*. Sep 14;25(18):9920, 2024. doi: 10.3390/ijms25189920. PMID: 39337408; PMCID: PMC11432455.
40. Zhou, Z., Hughes, K., Saif, N., Kim, H.* , **Masset, M. P.**, Zheng, M., Cecchi, A. C., Guo, D., Murdock, D. R., Pan, P., Clinton, J. S., Wang, J., Grealley, J. M., & Milewicz, D. M. *MYH11* rare variant augments aortic growth and induces cardiac hypertrophy and heart failure with pressure overload. *PLoS Genet*. Jul 14;21(7):e1011394, 2025. doi: 10.1371/journal.pgen.1011394. PMID: 40658722; PMCID: PMC12273954.

Manuscripts In Preparation, Submitted, or Preprints:

1. Nino*, M., H. Kim*, and **M. P. Massett**. Response to endurance training using critical speed: influence of genetic background and exercise intensity (*In preparation*).
2. Kim*, H., U. Saleh[§], and **M. P. Massett**. Endothelial function in mouse models of lupus (*In preparation*).

* current or former graduate student authors, [§] Undergraduate student author

Abstracts Presented at National/International Conferences

1. **Masset, M. P.**, S. B. Going and T. G. Lohman. Changes in body composition estimated by bioelectrical impedance analysis and hydrostatic weighing. *Int. J. Sports Med*. 12: 337, 1991. (Presented at the 1991 American College of Sports Medicine Annual Meeting, Orlando, FL)
2. **Masset, M. P.**, D. P. Williams, S. B. Going and T. G. Lohman. A comparison of dual energy radiography to a multiple component model for the estimation of percent fat. *Med. Sci. Sports Exerc*. 23 Supplement: S149, 1991. (Presented at the 1992 American College of Sports Medicine Annual Meeting, Dallas, TX)
3. Going, S., **M. Massett**, D. Williams, M. Hewitt, T. Lohman, L. Bare, and M. Hall. Multiple component estimation of body composition in middle-aged and older men and women. *Med. Sci. Sports Exerc*. 24 Supplement: S110, 1992. (Presented at the 1992 American College of Sports Medicine Annual Meeting, Dallas, TX)
4. **Masset, M. P.**, M. C. Hall, S. B. Going, T. G. Lohman, and T. A. Root. Detection of small changes in soft tissue composition by dual-energy x-ray absorptiometry. *Med. Sci. Sports Exerc*. 24 Supplement: S58, 1992. (Presented at the 1992 American College of Sports Medicine Annual Meeting, Dallas, TX)
5. **Masset, M. P.**, and K. C. Kregel. The cardiovascular responses to heat stress following water deprivation in anesthetized rats. *Med. Sci. Sports Exerc*. 26 Supplement: S161, 1994. (Presented at the 1994 American College of Sports Medicine Annual Meeting, Indianapolis, IN)
6. Kregel, K.C., **M. P. Massett**, and S. J. Lewis. Role of constitutive nitric oxide synthase in heat-induced hindlimb vasodilation in the rat. (Presented at the 1995 American Heart

Association Scientific Conference Functional and Structural Aspects of the Vascular Wall, Salt Lake City, UT.)

7. **Masset, M. P.**, and K. C. Kregel. Aging, nitrosyl factors, and the cardiovascular responses to heat stress in rats. *FASEB J.* 9: A336, 1995. (Presented at the 1995 Experimental Biology Meeting, Atlanta, GA)
8. **Masset, M. P.**, S. J. Lewis, and K. C. Kregel. Effect of hyperthermia on the hemodynamic responses to α - and β -adrenoceptor agonists. *FASEB J.* 10: A589, 1996. (Presented at the 1996 Experimental Biology Meeting, Washington, DC)
9. Kregel, K. C., D. A. Morgan, K. E. Anderson, **M. P. Massett**, and H. M. Stauss. Aging is not accompanied by sympathetic hyperresponsiveness to environmental stress. *FASEB J.* 10: A592, 1996. (Presented at the 1996 Experimental Biology Meeting, Washington, DC)
10. Stauss, H. M., **M. P. Massett**, K. E. Anderson, and K. C. Kregel. High frequency blood pressure oscillations can be modulated by the sympathetic nervous system. *FASEB J.* 10: A9, 1996. (Presented at the 1996 Experimental Biology Meeting, Washington, DC)
11. Kregel, K. C., D. A. Morgan, K. E. Anderson, **M. P. Massett**, and H. M. Stauss. Modulation of baroreflex sensitivity and spectral power of blood pressure by heat stress and aging. *The Physiologist.* 39: A16, 1996. (Presented at the APS Conference The Integrative Biology of Exercise, Vancouver, B.C., Canada)
12. **Masset, M. P.**, S. J. Lewis, J. N. Bates, G. Aldape, and K. C. Kregel. Effect of heating on vascular reactivity in rat mesenteric arteries. *FASEB J.* 11: A263, 1997. (Presented at the 1997 Experimental Biology Meeting, New Orleans, LA)
13. **Masset, M. P.**, S. J. Lewis, H. M. Stauss, and K. C. Kregel. Vascular reactivity and baroreflex function during hyperthermia in conscious rats. *FASEB J.* 12: A986, 1998. (Presented at the 1998 Experimental Biology Meeting, San Francisco, CA)
14. **Masset, M. P.**, A. Koller, and G. Kaley. Hyperosmolarity-induced dilation in rat skeletal muscle arterioles. *The Physiologist.* 41: 275, 1998. (Presented at the 1998 APS Conference Endothelial Regulation of Vascular Tone: Molecular to Integrative Physiology, Augusta, GA)
15. **Masset, M. P.**, A. Koller, and G. Kaley. K_{ATP} channels mediate glucose-induced dilation. *FASEB J.* 13: A30, 1999. (Presented at the 1999 Experimental Biology Meeting, Washington, DC)
16. Kaley, G., M. Szekeres, **M. Massett**, and A. Koller. Exercise enhances myogenic response of intramural coronary arterioles. Role of smooth muscle hypertrophy and altered endothelial function. *Physiol Res.* 48 Suppl 1:S1-143, 1999. (Presented at the Federation of European Physiological Societies Congress, Prague, Czech Republic, June 1999)
17. **Masset, M. P.**, A. Koller, and G. Kaley. Effect of MAP Kinase Kinase (MEK) inhibitor PD98059 on constrictor responses in skeletal muscle arterioles. *FASEB J.* 14: A28, 2000. (Presented at the 2000 Experimental Biology Meeting, San Diego, CA)

18. Korshunov, V. A., **M. P. Massett**, and B.C. Berk. Omapatrilat augments outwards vascular remodeling in genetically hypertensive rats. *Endothelium* 9(5-6):291-518, 2002. (Presented at the 2002 International Vascular Biology Meeting, Karuizawa, Japan)
19. **Masset, M. P.**, and B. C. Berk. Exercise capacity and skeletal muscle capillary density are correlated in inbred mouse strains. <http://select.biosis.org/faseb/faseb.html>, on-line addendum to *FASEB J.* (Presented at the 2004 Experimental Biology Meeting, Washington, DC, 04/04)
20. Chen, C., V. A. Korshunov, **M. P. Massett**, and B. C. Berk. Impaired endothelium-dependent vasorelaxation was predictive for intima-media thickening in mice. *Arterioscler. Thromb. Vasc. Biol.* 25: e67, 2005. (Presented at AHA 6th Annual Conference on Arteriosclerosis, Thrombosis and Vascular Biology, Washington, DC, 04/05)
21. Barker, T. A., **M. P. Massett**, V. A. Korshunov, A. M. Mohan, B. C. Berk. Valsartan reduces restenosis following balloon injury via angiotensin type 2 receptor, bradykinin 1 receptor and bradykinin 2 receptor dependent pathways. *Arterioscler. Thromb. Vasc. Biol.* 25: e49, 2005. (Presented at AHA 6th Annual Conference on Arteriosclerosis, Thrombosis and Vascular Biology, Washington, DC, 04/05)
22. **Masset, M. P.**, and B. C. Berk. Genome scan for exercise training responses. <http://select.biosis.org/faseb/faseb.html>, on-line addendum to *FASEB J.* (Presented at the 2006 Experimental Biology Meeting, San Francisco, CA, 04/06)
23. Daul, M., V. A. Korshunov, **M. P. Massett**, and B. C. Berk. Axl Contributes to Vascular Impairment in DOCA-Salt Induced Hypertension. *Hypertension* 48: e100, 2006. (Presented at the 60th Annual Fall Conference and Scientific Sessions of the Council for High Blood Pressure Research, San Antonio, TX, 10/06)
24. Abe, J. C.-H. Woo, **M. P. Massett**, T. Shishido, S. Itoh, B. Ding, C. McClain, W. Che, S. R. Vulapalli, and C. Yan. Erk5 activation inhibits inflammatory responses via peroxisome proliferator-activated receptor δ stimulation in skeletal muscle: possible involvement in aging. (Presented at the 3rd Annual Symposium of the American Heart Association Council on Basic Cardiovascular Sciences, Keystone, CO, 08/06)
25. Woo, C.-H., **M. P. Massett**, T. Shishido, S. Itoh, B. Ding, C. McClain, W. Che, C. Yan, J. Abe. Heme oxygenase-1 and a carbon monoxide releasing compound, $[\text{Ru}(\text{CO})_3\text{Cl}_2]_2$, -induced ERK5 activation inhibits inflammatory responses via peroxisome proliferator-activated receptor δ stimulation in skeletal muscle. *Circulation* 114: (Suppl. II), II-160, 2006. (Presented at the American Heart Association Scientific Sessions 2006, Chicago, IL, 11/06)
26. Pang, J. C. Yan, **M. Massett**, and B. Berk. GIT1 mediated HDAC5 phosphorylation by angiotensin II through Src, PLC γ and CamKII. *FASEB J.* 21:871.11, 2007. (Presented at the 2007 Experimental Biology Meeting, Washington, DC, 04/07)
27. Pang, J., R. Hoefen, G. Yin, R. J. White, C. Yan, **M. P. Massett**, B. C. Berk. Git1 is required for pulmonary vascular development. *Circulation* 116: (Suppl. II), II_36, 2007. (Presented at the American Heart Association Scientific Sessions 2007, Orlando, FL 11/07, Cournand and Comroe Young Investigator Prize in Cardiopulmonary and Critical Care)

28. Wang, J., Y. Taba, J. Pang, **M. Massett**, C. Yan, B. Berk. GIT1 regulates angiogenesis by affecting endothelial cell podosome formation and migration. *Circulation* 116: (Suppl. II), II_81, 2007. (Presented at the American Heart Association Scientific Sessions 2007, Orlando, FL 11/07)
29. **Masset, M. P.** and B. C. Berk. Quantitative trait loci for exercise capacity and response to training in FVB/NJ and C57BL/6J mice. *FASEB J.* 23:801.6, 2009. (Presented at the 2009 Experimental Biology Meeting, New Orleans, LA, 04/09)
30. Courtney*, S. M. and **M. P. Massett**. Mouse strain dependent variation in exercise capacity. *FASEB J.* 24: 618.21, 2010. (Presented at the 2010 Experimental Biology Meeting, Anaheim, CA, 04/10)
31. **Masset, M. P.** and B. C. Berk. Quantitative trait loci for exercise capacity and response to training in mice. (Presented at 9th annual meeting of Complex Trait Community, Chicago, IL, 05/10)
32. **Masset, M. P.** and S. M. Courtney*. Effect of chromosome substitution on endurance exercise capacity in mice. *Med. Sci. Sports Exerc.* 42 (Supplement 2): 100-101, 2010. (Presented at ACSM Conference on Integrative Physiology of Exercise, Miami, FL 09/10).
33. Avila*, J., S. K. Kim*, and **M. P. Massett**. Responses to exercise training are genetically determined in inbred mouse strains. *FASEB J.* 25: 862.2, 2011. (Presented at 2011 Experimental Biology, Washington, DC, 04/11)
34. Kim*, S. K., J. Avila*, and **M. P. Massett**. Effect of exercise training on vascular reactivity in inbred strains of mice. *FASEB J.* 25: 1b566, 2011. (Presented at 2011 Experimental Biology, Washington, DC, 04/11)
35. Courtney*, S. M., and **M. P. Massett**. Association mapping of endurance exercise capacity in 32 inbred mouse strains. (Presented at Mouse Genetics 2011, Washington, DC, 06/11)
36. Kim*, S. K., J. Avila*, and **M. P. Massett**. Strain-dependent variation in vasoreactivity in isolated mouse thoracic aorta. *FASEB J.* 26: 1098.12, 2012. (Presented at 2012 Experimental Biology, San Diego, CA, 04/12)
37. Avila*, J. J., S. K. Kim*, and **M. P. Massett**. Haplotype association mapping for exercise training in inbred mice. *FASEB J.* 26: 1b750, 2012. (Presented at 2012 Experimental Biology, San Diego, CA, 04/12)
38. Courtney*, S. M., and **M. P. Massett**. The effect of chromosome substitution on endurance exercise capacity in inbred and F₂ generation mice. *FASEB J.* 26: 1b806, 2012. (Presented at 2012 Experimental Biology, San Diego, CA, 04/12)
39. Kim*, S. K., J. Avila*, and **M. P. Massett**. Genome-wide association mapping of vasoreactivity in thoracic aorta from inbred mice. *FASEB J.* 27:1212.13, 2013 (Presented at 2013 Experimental Biology, Boston, MA, 04/13)
40. Avila*, J.J., S. K. Kim, and **M. P. Massett**. Identification of phenotypic adaptations to exercise training across mouse strains classified as high and low responders. *FASEB J.*

27:lb757 (Presented at 2013 Experimental Biology, Boston, MA, 04/13)

41. **Masset, M. P.**, J. J. Avila*, and S. K. Kim*. Genetic analysis of exercise capacity and training responses in 129S1/SvImJ and NZW/LacJ mice. (Presented at Complex Trait Community 12th Annual Meeting, Madison, WI, 05/13)
42. Kim*, S. K., J. Avila*, and **M. P. Massett**. Genetic background limits the endothelial response to exercise training. *Med. Sci. Sports Exerc.* 46 Supplement: S508, 2014 (Presented at 2014 American College of Sports Medicine (ACSM) meeting, Orlando, FL, 05/14)
43. Kim*, S. K., J. Avila*, and M. P. Massett. Strain-dependent variation in vasoreactivity in isolated mouse thoracic aorta. *FASEB J.* 28:705.8, 2014 (Presented at 2014 Experimental Biology, San Diego, CA, 04/14)
44. **Masset, M. P.**, J. J. Avila*, and S. K. Kim*. Genetic analysis of exercise capacity and training responses in 129S1/SvImJ and NZW/LacJ mice. *FASEB J.* 28:711.12, 2014 (Presented at 2014 Experimental Biology, San Diego, CA, 04/14)
45. Avila*, J.J., S. K. Kim, and **M. P. Massett**. Interaction between genetic background and training intensity influences training responses. *FASEB J.* 28:LB802, 2014 (Presented at 2014 Experimental Biology, San Diego, CA, 04/14)
46. Kim*, S. K., J. J. Avila*, and **M. P. Massett**. Genetic regulation of endothelial responses to exercise training. *FASEB J.* 29: lb 728, 2015. (Presented at 2015 Experimental Biology, Boston, MA, 03/15)
47. Avila*, J. J., S. K. Kim*, and **M. P. Massett**. Strain-dependent metabolic phenotype responses to various exercise paradigms in inbred mice. *FASEB J.* 29: 665.1, 2015. (Presented at 2015 Experimental Biology, Boston, MA, 03/15)
48. **Masset, M. P.**, J. J. Avila*, and S. K. Kim*. Mouse strain dependent variation in exercise capacity and responses to training. (Presented at Complex Trait Community 14th Annual Meeting, Portland, OR, 06/15)
49. **Masset, M. P.**, J. J. Avila*, and S. K. Kim*. Mouse strain dependent variation in exercise capacity and responses to training. *FASEB J.* 30:1028.2, 2016. (Presented at 2016 Experimental Biology, San Diego, CA 3/16)
50. **Masset, M. P.**, J. J. Avila*, and S. K. Kim*. Role of chromosome 14 in the genetic basis for endurance exercise capacity and responses to training in mice. *FASEB J.* 32 (Issue 1_supplement): 585.4, 2018 (Presented at 2018 Experimental Biology, San Diego, CA, 4/18)
51. Kim, H.* , M. Luttrell, S. Y. Shin*, D. Holly*, H. Dezell†, C. Woodman, and **M. Massett**. Heterogeneous effects of aging on vasomotor function in large and small arteries. *FASEB J.* 33 (Issue 1_supplement): lb478, 2019 (Presented at 2019 Experimental Biology, Orlando, FL, 4/19)
52. Holly, D. S., H. Kim, S. Y. Shin*, H. Dezell†, C. Woodman, and **M. P. Massett**. Mouse genetic background influences endothelial function along the mouse vascular tree. *FASEB*

- J. 33 (Issue 1_supplement): Ib514, 2019 (Presented at 2019 Experimental Biology, Orlando, FL, 4/19)
53. Villalobos, A. R. and **M. P. Massett**. A simple PhUn week activity to teach integrative physiology of the heart and lung to first-graders (Presented at 2019 Experimental Biology, Orlando, FL, 4/19)
 54. Bywaters, B. C., **M. P. Massett**, S. Padgham, J. Chen, G. M. Rivera, J. P. Trzeciakowski, D. M. Milewicz, and A. Trache. Extracellular matrix effect on integrin-based cell adhesion in smooth muscle alpha-actin deficient vascular smooth muscle cells (Presented at Biophysical Society 64th Annual Meeting, San Diego, CA, 02/20)
 55. Bywaters, B. C., **M. P. Massett**, S. Padgham, J. Chen, G. M. Rivera, J. P. Trzeciakowski, D. M. Milewicz, and A. Trache. Loss of smooth muscle alpha-actin impairs cellular mechanosensing. (Scheduled for presentation at American Chemical Society National Meeting & Expo, Philadelphia, PA, 3/20)
 56. Holly, D. S.*, **M. P. Massett**, S. Gaytan*, H. Kim*, S. Shin*, and C. Woodman. Genetic background influences endothelial function along the mouse vascular tree *FASEB J.* 34 Issue 1_supplement), 2020 doi.org/10.1096/fasebj.2020.34.s1.05781 (Scheduled for presentation at 2020 Experimental Biology meeting, San Diego, CA, 04/20)
 57. Khedmatgozar, H., **M. P. Massett**, M. Fokar, J. T. Lightfoot, S. R. Kleeberger, and H. L. Vellers. Influence of genetic background on heart mitochondrial DNA lesions and copy number in inbred mice. *Med. Sci. Sports Exerc.* 52 (S7): 1018, 2020. (Presented at 2020 ACSM Annual Meeting, San Francisco, CA 05/20)
 58. Kim*, H., C. Matejka†, and **M. Massett**. A systematic review of exercise training protocols for mice. (Presented at 2020 APS Intersociety Meeting: Integrative Physiology of Exercise, 11/20).
 59. Kim*, H., **M. P. Massett**, H. C. Gibbs, S. Padgham, A. Chattopadhyay, A. T. Yeh, D. M. Milewicz, and A. Trache. Downregulation of smooth muscle alpha-actin reduces contractility and interaction of vascular smooth muscle cells with the matrix. (Presented at American Chemical Society National Meeting & Expo, 4/9/21)
 60. Holly*, D., H. Kim*, S. Gaytan, C. R. Woodman, and **M. P. Massett**. Genetic background influences endothelium-dependent vasomotor function in large arteries. *FASEB J.* 35 Issue S1, 2021 doi.org/10.1096/fasebj.2021.35.S1.02058 (Presented at 2021 Experimental Biology, 4/21)
 61. Nino*, M., H. Kim*, and **M. P. Massett**. Response to endurance training using critical speed: influence of genetic background and exercise intensity. *FASEB J.* 36 Issue S1, 2022 doi.org/10.1096/fasebj.2022.36.S1.R6102 (Presented at 2022 Experimental Biology Meeting, Philadelphia, PA, 4/22)
 62. Kim*, H., M. Nino*, and **M. Massett**. Contribution of genetic background to vascular adaptation to exercise training based on critical speed of different intensities. *FASEB J.* 36 Issue S1, 2022 doi.org/10.1096/fasebj.2022.36.S1.R5806 (Presented at 2022 Experimental Biology Meeting, Philadelphia, PA, 4/22)

63. Blume, G. R., A. B. Salmon, H. Liang, E. Fernandez, V. Villanueva, N. Musi, P. J. Hornsby, **M. P. Massett**, and H. L. Vellers. Intrastrain variation in exercise trainability is linked to changes in body weight in HET3 mice. *Med. Sci. Sports Exerc.* 54 Issue 9S:164, 2022 doi: 10.1249/01.mss.0000877084.62108.59 (Presented at 2022 ACSM Annual Meeting, San Diego, CA 05/22)
64. Zhou, Z., K. Hughes, N. Saif, P. Pan, **M. P. Massett**, M. Zheng, A. C. Cecchi, D. Guo, J. M. Greally, J. Wang, A. J. Marian, D. M. Milewicz. *MYH11* rare variant causes aberrant cardiac fibrosis and cardiac hypertrophy and failure with increased biomechanical stress in male mice. (Presented at International Vascular Biology Meeting, Oakland, CA, 10/22)
65. Ojha, K. R., H. Kim*, S. Padgham, L. Hopkins, A. Chattopadhyay, G. Han, D. M. Milewicz, **M. P. Massett**, and A. Trache. Contractility and adhesion to the matrix is impaired in vascular smooth muscle from Acta2 R149C mice. (Presented at Cell Bio 2022, 12/22, Washington, D.C.)
66. Ojha, K. R., H. Kim*, S. Padgham, L. Hopkins, A. Chattopadhyay, G. Han, D. M. Milewicz, **M. P. Massett**, and A. Trache. Smooth muscle alpha-actin R149C mutation downregulates integrin recruitment at cell-matrix adhesions. (Presented at ACS Spring 2023, 3/23, Indianapolis, IN)
67. Kim*, H., M. Nino*, and **M. P. Massett**. Effect of spermidine on endothelial function in Systemic Lupus Erythematosus (SLE). *Physiology* 38: S1, 2023 doi.org/10.1152/physiol.2023.38.S1.5729710 (Presented at American Physiology Summit, 04/23, Long Beach, CA)
68. Nino*, M., H. Kim*, and **M. P. Massett**. Critical speed-based exercise training in inbred mice: interaction of training intensity and genetics. *Med. Sci. Sports Exerc.* 55(9S):p 484, 2023. DOI: 10.1249/01.mss.0000984340.91969.38 (Presented at 2023 ACSM Annual Meeting, 05/23, Denver, CO)
69. Azari, H., K. Garza, S. Galindo, N. Balagopal, A. Salmon, H. Liang, E. Fernandez, V. Villanueva, N. Musi, P. Hornsby, **M. Massett**, H. Vellers, M. Fokar, C. Crasto, K. Albracht-Schulte. Effects of aerobic exercise training on age-related dysbiosis in HET3 male mice *Curr. Dev. Nutr.* 7:101559, 2023, DOI: 10.1016/j.cdnut.2023.101559 (Presented at Nutrition 2023, 07/23, Boston, MA)
70. Kim, H.* and **M. P. Massett**. Effect of rapamycin on endothelial function in systemic lupus erythematosus (SLE). *Physiology* 39: S1, 2024 doi.org/10.1152/physiol.2024.39.S1.632 (Presented at American Physiology Summit, 04/24, Long Beach, CA)
71. **Masset, M.**, H. Kim, and M. Fokar. Effect of inbred mouse strain on the transcriptomic response to exercise training. *Physiology* 40: S1, 2025 Baltimore, MD (Presented at American Physiology Summit, 04/25, Baltimore, MD)
72. Smith, C., K. Garza, H. Azari, H. Vellers, M. Abdelrahman, B. Zakia, M. Fokar, S. Dhanasekara, A. B. Salmon, H. Liang, E. Fernandez, V. Villanueva, N. Musi, P. J. Hornsby, **M. P. Massett** and K. Albracht-Schulte. Aerobic Exercise Training Alters Gastrointestinal Microbiota in HET3 Mice. (Presented at 2025 ACSM Annual Meeting, Atlanta, GA 05/25)
73. Mostaffa-Viloria, J. M. A. B. Salmon, N. Musi, M. T. Kinter, **M. P. Massett**, H. L. Vellers. HET-3 mice exhibit high variability in aerobic capacity trainability, linked to pathways

regulating changes in mitochondrial function and antioxidant capacity. (Submitted for presentation at American Physiology Summit, 04/26, Minneapolis, MN)

74. **Massett, M. P.** Exercise training responses in lupus-prone MRL-lpr mice. (To be presented at American Physiology Summit, 04/26, Minneapolis, MN)

Abstracts Presented at Regional/Local Conferences

1. **Massett, M. P.**, S. B. Going and T. G. Lohman. Changes in body composition estimated by bioelectrical impedance analysis and hydrostatic weighing. *Int J Sports Med* 12: 337, 1991. (Presented at the 1990 American College of Sports Medicine, Southwest Chapter Annual Meeting, San Diego, CA.)
2. I. A. Trounce, M. McKenzie, C. A. Cassar, C. A. Ingraham, C. A. Lerner, D. A. Dunn, C. L. Donegan, J. Littleton, W. K. Pogozelski, K. Takeda, J. P. Corsetti, **M. Massett**, R. B. Baggs, R. L. Howell and C. A. Pinkert. Characterization of xenomitochondrial mouse models. (Presented at Genetics Day 2004, University of Rochester Medical Center, 04/04)
3. Vellers, H. L., J. T. Lightfoot, **M. P. Massett**, and S. R. Kleeberger. Association between mitochondrial DNA sequence and DNA damage with the response to endurance training in mice. (Presented at 2018 Southeast Chapter of American College of Sports Medicine Regional Meeting, Chattanooga, TN, 2/18)
4. **Massett, M.**, H. Gibbs, S. Padgham, J. Chen, A. Yeh, D. Milewicz, and A. Trache. Cellular contractility and adhesion are impaired in vascular smooth muscle from *Acta2*^{-/-} mice. (Presented at 2019 Gulf Coast Vascular Research Consortium Meeting, Houston, TX, 8/19)
5. Blume, G. B., A. B. Salmon, H. Liang, E. Fernandez, N. Musi, P. J. Hornsby, **M. P. Massett**, and H. L. Vellers. Intrastrain variation in exercise trainability is linked to changes in body weight in HET3 mice. *International Journal of Exercise Science: Conference Proceedings*: Vol. 11: Iss. 9, Article 1. <https://digitalcommons.wku.edu/ijesab/vol11/iss9/1> (Presented at Central States Chapter ACSM Annual Meeting, Fayetteville, Arkansas, 03/22)
6. Kim*, H., M. Nino*, and **M. Massett**. Contribution of genetic background to vascular adaptation to exercise training based on critical speed of different intensities. (Presented at The Rio Grande Physiological Society Annual Meeting, Albuquerque, NM, 03/24)
7. Addo[†], D. and **M. Massett**. The Effects of Genetic Background and Exercise Intensity on Training Responses in FVB Mice. (Presented at 2024 Transformative Undergraduate Experiences Symposium, Lubbock, TX, 10/24)
8. Addo[†], D. and **M. Massett**. Genetic Influence on Exercise Adaptations: Strain-Specific Responses to Endurance Training in Mice. (Presented at 2025 TTU Undergraduate Research Conference, Lubbock, TX, 4/25)
9. Smith, C., K. Garza, H. Azari, H. Vellers, M. Abdelrahman, B. Zakia, M. Fokar, S. Dhanasekara, A. B. Salmon, H. Liang, E. Fernandez, N. Musi, P. J. Hornsby, **M. P. Massett** and K. Albracht-Schulte. Aerobic Exercise Training Alters Gastrointestinal Microbiota in HET3 Mice. (Presented at the TTU Obesity Research Institute 10th Annual Meeting, Lubbock, TX, 5/25)

10. Addo[†], D. and **M. Massett**. Genetic contribution to individual responses to training. (Presented at 2025 Transformative Undergraduate Experiences Symposium, Lubbock, TX, 10/25)

11. Sander[†], G. and **M. Massett**. Transcriptomic Analysis of Exercise Response in Inbred Mouse Strains. (Presented at 2025 Transformative Undergraduate Experiences Symposium, Lubbock, TX, 10/25)

NOTE: * indicates graduate student authors, † indicates undergraduate student authors.

PRESENTATIONS/INVITED SEMINARS (RECENT)

March 28, 2025, The Rio Grande Physiological Society Annual Meeting, Portales, NM, "Exercise Training Responses: A Mouse's View".

TEACHING ACTIVITIES

Graduate/Medical School level courses

Texas Tech University (TTU)

KIN 5315, Research Methods I (3.0 CR), 2019-2024

- The course is designed to introduce students to the research process and to teach students to become good consumers and producers of research.

KIN 7301, Advanced Exercise Physiology I (3.0 CR), 2020, 2022

- Advanced study of mechanisms that regulate the cardiovascular and endocrine systems with the application of physiological principles to understand responses and adaptations to exercise (Responsible for endocrine lectures).

KIN 7304, Advanced Topics in Exercise Physiology: Introduction to Exercise Genomics (3.0 CR), 2021

- The course is designed to introduce students to the basic principles of genetics and genomic analysis as they pertain to exercise physiology, health, and chronic disease associated with low levels of fitness.

KIN 7104: Exercise Physiology Seminar (1.0 CR), 2021, 2023, 2024

- This course is designed to provide students with a forum to discuss new research in exercise physiology by attending and organizing presentations.

Undergraduate level

Texas Tech University

KIN 3305 Exercise Physiology (3.0 CR), 2025

KIN 3306, Applied Exercise Physiology (3.0 CR), 2020-2025

HEPlus, Honors section of KIN 3306, Applied Exercise Physiology, 2024

Graduate Student Committees

Current Committee Member:

- 2021 Casey Appell, Ph.D. candidate, Exercise Physiology, TTU
2025 Tanvi Kale, Ph.D. student, Nutritional Sciences, TTU

Previous Committee Chair, Ph.D.:

- 2024 Hyoseon Kim, Ph.D., Exercise Physiology, TTU (Postdoctoral Scientist, Texas A&M School of Medicine)
Dissertation: *The Effect of Enhancing Mitophagy on Endothelial Function in Systemic Lupus Erythematosus (SLE)*.
- 2022 Dylan S. Holly, Ph.D., KINE, Texas A&M (Co-Chair) (Research Physiologist, U.S. Naval Medical Service Corps)
Dissertation: *Genetic Background Influences Arterial Vasomotor Function in Male and Female Mice*.
- 2016 Joshua J. Avila, Ph.D., KINE, Texas A&M (Senior Research Compliance Administrator, Research Compliance and Biosafety, Texas A&M University)
Dissertation: *Association Between Genetic Background and the Response to Exercise Training*
- 2015 Seung Kyum Kim, Ph.D., KINE, Texas A&M (Associate Professor, Seoul National University of Science and Technology)
Dissertation: *Genetic Regulation of Intrinsic Endothelial Function and Endothelial Responses to Exercise Training*
- 2013 Sean M. Courtney, Ph.D., KINE, Texas A&M (Associate Vice President for Research Compliance, Integrity and Analytics, LSU)
Dissertation: *Genetic Regulation of Intrinsic Endurance Exercise Capacity in Mice*

Previous Committee Chair, M.S. (since 2019, 11 total):

- 2022 Matthew Nino, M.S. (thesis), Integrative Exercise Physiology, TTU
2019 Stephen M. Snyder, M.S. (non-thesis), KINE, Texas A&M
Hyoseon Kim, M.S. (non-thesis), KINE, Texas A&M

Previous Committee Member (since 2021, 34 total):

- 2024 Mauricio Martinez, Ph.D., Exercise Physiology, TTU
Nigel Jiwan, Ph.D., Exercise Physiology, TTU
Yejin Kang, Ph.D., Exercise Physiology, TTU
- 2022 Arun Maharaj, Ph.D. Exercise Physiology, TTU
Song Yi Shin, Ph.D., KINE, Texas A&M
- 2021 Casey Appell, M.S. Integrative Physiology, TTU
Fnu Arsalan Moinuddin, M.S. Exercise Physiology, TTU

Graduate Student Research/Mentoring:

- 2024 Yeosang Kim, M.S., Kinesiology, Texas Tech University (Clinical Exercise Physiologist, Mayo Clinic, Florida)

Undergraduate/High School Student Research/Mentoring (since 2019, 21 total):

- 2025 George Sander, Biochemistry, TrUE Scholars, Honors College, Texas Tech University
- 2025 Umniah Saleh, Animal Sciences, Texas Tech University
- 2024-25 Dickson Addo, BIOL, Bridges Across Texas Louis Stokes Alliance for Minority Participation (BAT-LSAMP), TrUE Scholar, Texas Tech University
- 2023 Dylan Stevens, KIN, Undergraduate Honors College Contract: "Sex differences in vascular function"
- 2021 Whitney Reinke, KIN, Texas Tech University (TTU HSC School of Medicine)
- 2020 Hannah Seo, Biochemistry, Texas Tech University (TTU HSC School of Medicine)
Caitlyn Majetka, KIN, Texas Tech University (TTU HSC School of Medicine)
- 2019 Elizabeth Newton, MED High, Faculty Research Host, MENTORS Project, hosted high school student research intern for 6 weeks in summer Texas A&M University.

PROFESSIONAL SERVICE

Editorial and Reviewing Activities

Editorial Boards:

- 2010 to present Frontiers in Vascular Physiology
- 2010 to 2013 Frontiers in Genomic Physiology

Journal Review: *AGE/GeroScience, AJP: Heart Circulatory Physiology, AJP: Regulatory, Integrative, Comparative Physiology, British Journal of Pharmacology, BMC Genomics, Cardiovascular Research, Cardiovascular Toxicology, Circulation, Circulation: Cardiovascular Genetics, Comparative Biology and Physiology, European Journal of Applied Physiology, Frontiers in Vascular Physiology, Genetics, Journal of Applied Physiology, Journal of Cardiovascular Translational Research, Journal of Vascular Research, Medicine and Science in Sports and Exercise, The Journal of Physiology, Physiological Genomics, Scientific Reports, Stress, Trends in Genetics, Canadian Journal of Cardiology, Respiratory Physiology & Neurobiology, Journal of Inflammation Research, G3: Genes Genomes Genetics, Physiological Reports, Aging, European Journal of Inflammation, Experimental Gerontology*

Grant Review:

- 2022 NIOSH Member Conflict Review, *ad hoc* reviewer
- 2016 - 17 Catapult Grant, College of Education and Human Development, Texas A&M, reviewer
- 2015 - 17 NIOSH Safety and Occupational Health Study Section, *ad hoc* reviewer
- 2014 Texas A&M Nutrition & Obesity Research Center (TAMNORC) Pilot Project Grants, reviewer
- 2011 WSGI Catalyst Grant Program, Texas A&M University (\$100,000 total awarded to 10 PIs, 24 total applicants), Review Coordinator/Reviewer

Promotion and Tenure Review:

2025	External Reviewer for candidate, (research/scholarship), Department of Kinesiology, University of Texas, El Paso
2022	External Reviewer for candidate (Scholarship only), Health and Exercise Physiology Department, Ursinus College
2019	External Reviewer for candidate, Department of Health and Exercise Science, University of Oklahoma

Committee and academic service (*recent*)

National/International:

2017 - 2023	Steering Committee, Physiological Genomics Interest Group, American Physiological Society (Newsletter Editor)
2013 - 2017	Awards Committee, Physiological Genomics Interest Group, American Physiological Society (Chair, 2014-2017)

University:

2024 (Sept) -	Member, Institutional Animal Care and Use Committee, Texas Tech University (subcommittee chair, 11/25)
2024 - 2025 2024	Member, Institutional Laboratory Safety Committee, Texas Tech University Graduate Dean's Representative for Psychological Sciences Ph.D. defense, Texas Tech University

College/Department:

Texas Tech

2025	Reviewer, A&S Faculty Research Advancement Program (RAP) Red and Black proposals
2025-	Departmental Promotion and Tenure Committee
2024-2025	Departmental Safety Officer, KSM
2021-2024	PhD Program Coordinator (KSM)
2020	PhD Qualifying Exam Committee, Chair
2020	Awards Committee
2020, -21, -24, -25	Member, Kinesiology Faculty Search Committee (KSM) (Ex. Phys., Ex. Phys., Health, Motor Behavior)

Other Professional Service

2025	Judge, Student poster presentations, The Rio Grande Physiological Society
2024	Judge, Texas Tech University Undergraduate Research Conference
2023	Judge Graduate Student Research Poster Competition, Texas Tech University
various dates	Mentor, American Physiological Society/National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) Minority Travel Award program, 1999, 2002, 2004, 2012, 2013

Engagement/Community Service

- 2025 Tech Savvy Workshop facilitator, "Exploring Human Biology-What Makes You You?", Texas Tech STEM Core.
- 2017, 2018 American Physiological Society PhUn Week, taught physiology to 1st grade class at Rock Prairie Elementary School, College Station, TX