Aaron B. Morton, Ph.D.

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Biography

Dr. Aaron Morton has served as an Assistant Professor in the Department of Kinesiology and Sport Management at Texas A&M University (TAMU) since 2022. His research focuses on neurovascular crosstalk during regeneration in soft tissue and biomaterial enhancement of regeneration, both in the context of injury and disease. He has published 25 articles in peer-reviewed journals (cited over 1000 times), 1 full and 1 provisional patent, and delivered 9 invited presentations. Dr. Morton has secured approximately $718,000 in research funding and research awards from various external and internal sources. In his teaching role, Dr. Morton instructs undergraduate courses in therapeutic principles and exercise physiology. He mentors 2 PhD students, 1 master's student, 5 undergraduates, and served as a committee member of 2 additional doctoral students and 1 additional master's student. His commitment to service is reflected in his involvement of various departmental, college, and university committees. Dr. Morton's achievements have been recognized through the numerous invited reviews for top-tier journals. Dr. Morton has performed professionally and has not engaged in behaviors that may lead to dismissal for case as specified in TAMU's System Policy 12.01, Section 4.3.

Degrees

2018	Ph.D., Exercise Physiology, University of Florida, Gainesville, FL, USA
2013	M.S., Exercise Science, University of West Florida, Pensacola, FL, USA
2010	B.S., Exercise Science, Harding University, Searcy, AR, USA

Texas A&M - Rank and Promotion History

Effective Date of Rank	End Date of Rank	Faculty Title	Tenure Classification	Department	College		
9/1/2022		Assistant Professor	Tenure-Track	KNSM	CEHD	DEF	

Revised 1/8/2025

Career Work Experience

2022-Present	Assistant Professor, Texas A&M University, Department of KNSM, College Station, Texas, United States
2023-Present	Faculty of the Cardiovascular Research Institute, Texas Health Science Center, College Station, Texas, United States
2018-2022	Postdoctoral Fellow, University of Missouri, Department of Medical Pharmacology and Physiology, Columbia, MO, United States
2013-2018	Research Assistant, University of Florida, Department of APK, Gainesville, FL, United States
2011-2013	Adjunct Instructor, University of West Florida, Department of HLES, Pensacola, FL, United States
2010-2012	Graduate Assistant, University of West Florida, Department of HLES, Pensacola, FL, United States

Awards and Honors

Year Conferred	Award and Honor Title	Conferring Organization	Award Classification	Award and Honor Level	Detailed Description of Award
2024	APS SURF Host	American Physiological Society	Service Award-Honor	National	Selected as an ideal lab for undergraduate training
2022	Research Symposium Best Postdoctoral Abstract Award	University of Missouri	Research Award	Local	
2022	Pappenheimer Postdoctoral Travel Award	Microcirculatory Society	Research Award	National	

2021	Health Science Research Day Basic Science Poster Award	University of Missouri	Research Award	Local	
2020	APS IPE Best Poster	American Physiological Society	Research Award	National	
2020	Cardiovascular Day Poster Award	University of Missouri	Research Award	Local	
2019	Provost's Scholar Award	University of Missouri	Research Award	Local	
2018	Neuromuscular Plasticity Summit Poster Award	University of Florida	Research Award	Local	
2013	Jane Adams Edmonds Endowed PhD Fellowship	University of Florida	Research Award	Local	
2012	Exercise Science Graduate Student of the Year	University of West Florida	Research Award	Local	

Professional Certifications

Effective Date	Expiration Date	Organization	Type	Board Certified	Board Eligible	Specialty	Sub-Specialty	Certification Number	Lifetime Board Certification
2011	2014	NSCA	CSCS			Organized Athletics			
2012	2014	ACSM	CES			Personal Training			

Teaching (Custom Section)

Course Title	Course	Credit Hours	Lab Hours	Instruction Mode	Lecture Hours	Student Credit Hours	Enrollment	If co-taught, % contributed to course	Descriptive	Semester	Multidisciplinary Collaboration Activities Included
Cardio Weightlifting	PEM 1120	2		In Person		2		100	University of West Florida	Fall 2010	
Cardio Weightlifting	PEM 1120	2		In Person		2		100	University of West Florida	Spring 2011	

Cardio Weightlifting	PEM 1120	2		In Person		2		100	University of West Florida	Fall 2011	
Cardio Weightlifting	PEM 1120	2		In Person		2		100	University of West Florida	Spring 2012	
Exercise Testing & Rx Lab	PET 2965		1	In Person		1		100	University of West Florida	Fall 2012	
Exercise Testing & Rx Lab	PET 2965		1	In Person		1		100	University of West Florida	Spring 2013	
Anatomy Lab	APK 2100		1	In Person	2	1		100	University of Florida	Fall 2013	
Physiology Lab	APK 2105		1	In Person	2	1		100	University of Florida	Spring 2014	
Physiology Lab	APK 2105		1	In Person	2	1		100	University of Florida	Fall 2014	
Physiology Lab	APK 2105		1	In Person	2	1		100	University of Florida	Spring 2015	
Physiology Lab	APK 2105		1	In Person	2	1		100	University of Florida	Fall 2015	
Physiology Lab	APK 2105		1	In Person	2	1		100	University of Florida	Spring 2016	
Therapeutic Principles	KINE 427	3		In Person	3	279	93	100	Texas A&M University	Fall 2022	
Research	KINE 491	4		In Person			2	100	Texas A&M University	Fall 2022	
Directed Studies	KINE 685	12		In Person			1	100	Texas A&M University	Fall 2022	
Therapeutic Principles	KINE 427	3		In Person	3	225	75	100	Texas A&M University	Spring 2023	
Physiology of Exercise	KINE 433	3		In Person	3	99	33	100	Texas A&M University	Spring 2023	
Research	KINE 491	4		In Person		4	2	100	Texas A&M University	Spring 2023	
Professional Internship	KINE 684	6		In Person		3	1	100	Texas A&M University	Spring 2023	
Directed Studies	KINE 685	12		In Person		5	3	100	Texas A&M University	Spring 2023	
Research	KINE 691	23		In Person		8	1	100	Texas A&M University	Summer 2023	
Directed Studies	KINE 685	12		In Person		2	1	100	Texas A&M University	Fall 2023	

Research	KINE 691	23		In Person		8	1	100	Texas A&M University	Fall 2023	
Therapeutic Principles	KINE 427	3		In Person	3	243	81	100	Texas A&M University	Fall 2023	
Therapeutic Principles	KINE 427	3		In Person	3	213	71	100	Texas A&M University	Spring 2024	
Research	KINE 691	4		In Person		1	1	100	Texas A&M University	Spring 2024	
Directed Studies	KINE 685	12		In Person		4	1	100	Texas A&M University	Spring 2024	
Research	KINE 691	23		In Person		9	1	100	Texas A&M University	Spring 2024	
Research	KINE 691	23		In Person		12	2	100	Texas A&M University	Summer 2024	
Directed Studies	KINE 685	2		In Person		0	2	100	Texas A&M University	Fall 2024	
Research	KINE 691	6		In Person		0	1	100	Texas A&M University	Fall 2024	
Therapeutic Principles	KINE 427	3		In Person	3	249	83	100	Texas A&M University	Fall 2024	
Directed Studies	KINE 685	12		In Person		5	2	100	Texas A&M University	Fall 2024	
Research	KINE 691	6		In Person		6	1	100	Texas A&M University	Fall 2024	

Additional Teaching Activities

Title	Audience	Location Instruction Delivered	Sponsoring Organization	Number of Participants	Descriptive	Start Date	End Date	Method of Delivery	Other Teaching Role	Student Collaborators	Teaching Innovation and Curriculum Development Type	Teaching Level
Careers in Exercise Physiology	Students	Columbia, MO	University of Missouri		Research Career	2020-04-03	2020-04-03	In Person	Instructor	No		Invited Lecture
Exercise Physiology	Students	Nashville, TN	Lipscomb University		ROS in Exercise	2020-09-07	2020-09-07	Online	Instructor			Invited Lecture
Microcirculation	Students	Columbia, MO	University of Missouri		Neurovascular Regeneration	2021	2021	Online	Instructor			Invited Lecture

Undergraduate Advising

2020-2021	Activity Advised/Mentored: Research, Undergraduate Name: Yuki Yang, Description: McNair Scholar
2022 -2023	Number of Undergraduate(s) : 2, Description: Research Mentoring
2022-Ongoing	Activity Advised/Mentored: Research, Undergraduate Name: Alexandra Naman, Description: APS Summer Research Fellowship, Award: Best Undergraduate Research Award APS Summit Long Beach, CA 2024
2024 -Ongoing	Number of Undergraduate(s) : 2, Description: Research Mentoring

Graduate Advising

Doctoral Candidate: Jacob Kendra *Year 4* Present
Role: Mentor and Chair
Awards: Huffines Graduate student research award 2022-2023
SEHD Graduate student research award 2023-2024
Huffines Graduate student research award 2024-2025

Doctoral Student: Shadi Golpasandi *Year 2* Present
Role Mentor and Chair

Doctoral Student Committee Member:
Amin Mohajeri (PhD Candidate) Present
Bethany Guerra (1st year) Present

Master's Student: Chair Tsia Ying *Year 2* Present

Master's Student: Committee Member Champ Jones *Year 2* Present

Publications, Conference Proceedings, Patents and Creative Products/Innovations

Patents: *denotes trainee

(2025) Morton, AB., Nghiem, PP., Kendra, JA.*, *Reacted Matrix (RM) for Dispersion of Stem Cells* (covers original biomaterial development and ability to disperse stem cells in large animals for over a month, permitting implantation and incorporation). U.S. Provisional Patent (No. 63/754,943) filed 2/6/2025 by the Texas A&M University System.

(2022) Morton, AB., Segal, SS., Brow, RK., Semon, J., *Biomaterial Compositions and Methods of Treatment* (covers original biomaterial development and treatment methods for a variety of muscle injuries and diseases) U.S. Full Patent (No.

WO2023034523A1) filed 9/1/22 Filed by the University of Missouri, jointly assigned to Texas A&M System and allocated 20% of financial rights to Texas A&M System **(filed also in Canada, Europe, PacRim, and US)**

Journal Article: * denotes trainee, first author position denotes writer, last author position denotes laboratory director

Completed/Published

1. **Morton A. B.**, Jacobsen N. L., Dillar A., Kendra J. A.*, Golpasandi S.*, Cornelison D. D., Segal S. S., (2024) Inducible deletion of endothelial cell *Efnb2* delays capillary regeneration and attenuates myofibre reinnervation following myotoxin injury in mice. *Journal of Physiology.* August, 2024 DOI: 10.1113/JP285402
   Note: Additional citation published as an invited perspective paper of our impactful work: Chakkalakal JV. Contribution of vascular endothelium to the regeneration of neuromuscular junctions after degenerative injury to adult skeletal muscle. J Physiol. 2024 Oct;602(19):4701-4702. doi: 10.1113/JP287384. Epub 2024 Oct 2. PMID: 39355974.

2. Ryan P. J., Uranga S., Stanelle S. T., Lewis M. H., O'Reilly C. L., Cardin J. M., Deaver J. W., **Morton A. B.,** Fluckey J. D., (2024) The autophagy inhibitor NSC185058 suppresses mTORC1-mediated protein anabolism in cultured skeletal muscle. *Scientific Reports*. April 6, 2024

3. Jacobsen N. L., **Morton A. B.**, Segal S. S., (2023) Angiogenesis precedes myogenesis during regeneration following biopsy injury of skeletal muscle. *Skeletal Muscle*. February 14, 2023 Note: co first authors

4. Ichinoseki-Sekine N., Smuder A. J., **Morton A. B.**, Hinkley J. M., Mor Huertas A., Powers S. K., (2021) Hydrogen sulfide donor protects against mechanical ventilation-induced atrophy and contractile dysfunction in the rat diaphragm. *Clin Transl Sci*. June 3, 2021.

5. **Morton A. B.**, Jacobsen N. L., and Segal S. S., (2021) Functionalizing biomaterials to promote neurovascular regeneration following muscle injury. *American Journal of Physiology-Cell Physiology* Jun 1, 2021.

6. Hall S. E., Ahn B., Smuder A. J., **Morton A. B.**, Hinkley J. M., Wiggs M. P., Sollanek K. J., Hyatt H., Powers S. K., (2021) Comparative efficacy of angiotensin II type I receptor blockers against ventilator-induced diaphragm dysfunction in rats. *Clinical Translational Science*. Nov. 22, 2021

7. Smuder A. J., Turner S. M., Schuster C. M., **Morton A. B.**, Hinkley J. M., Fuller D. D., (2020) Hyperbaric oxygen treatment following mid-cervical spinal cord injury preserves diaphragm muscle function. *International Journal of Molecular Science*. Sep. 30, 2020

8. Huertas A. M., **Morton A. B.**, Ichinoseki-Sekine N., Hinkley J. M., Smuder A. J., (2020) Modification of neuromuscular junction protein expression by exercise and doxorubicin. *Med Sci Sports Exerc*. Jul. 2020.

9. **Morton AB**, Norton CE, Jacobsen NL, Fernando, CA, Cornelison DDW, Segal SS. (2019) Barium chloride injures myofibers through calcium-induced proteolysis with fragmentation of motor nerves and microvessels. *Skeletal Muscle*. Nov. 6, 2019

10. Smuder A. J., **Morton A. B.**, Hall S. E., Wiggs M. P., Ahn B., Wawrzyniak N. R., Sollanek K. J., Min K., Kwon O. S., Nelson W. B., Powers S. K., (2019) Effects of exercise preconditioning and HSP72 on diaphragm muscle function during mechanical ventilation. *J Cachexia Sarcopenia Muscle*. Apr. 10, 2019

11. Hinkley J. M., **Morton A. B.**, Ichinoseki-Sekine N., Huertas A. M., Smuder A. J., (2019) Exercise training prevents Doxorubicin-induced Mitochondrial Dysfunction of the Liver. *Med Sci Sports Exerc*. Jan 8

12. **Morton A. B.**, Smuder A. J., Wiggs M. P., Hall S. E., Ahn B., Hinkley J. M., Ichinoseki-Sekine N., Mor Huertas A., Ozdemir M., Yoshihara T., Wawrzyniak N. R., Powers S. K., (2019) Increased SOD2 in the diaphragm contributes to exercise-induced protection against ventilator-induced diaphragm dysfunction. *Redox Biology.* Jan. 20 402-414.

13. Powers S. K., **Morton A. B.**, Hyatt H., Hinkley M. J., (2018) The renin-angiotensin system and skeletal muscle. *Exercise and Sport Sciences Reviews*. DOI: 10.1249/JES

14. **Morton AB**, Mor Huertas A, Hinkley JM, Ichinoseki-Sekine N, Christou DD, and Smuder.AJ, (2018). Mitochondrial accumulation of doxorubicin in cardiac and diaphragm muscle following exercise preconditioning. *Mitochondrion*. Feb 2018 DOI: 10. 1016

15. Turley K, Rivas JD, Townsend JR, **Morton AB**., (2017). Effects of caffeine on heart rate variability in boys. *Journal of Caffeine Research*. (2): 71-77

16. Sollanek K. J., Burniston J. G., Kavazis A. N., **Morton A. B.**, Wiggs M. P., Ahn B., Smuder A. J., Powers S. K., Global proteome changes in the rate diaphragm induced by endurance exercise training (2017) PLOS One., PONE-D-16-34299R2

17. Kavasis A.N., **Morton A. B.**, Hall S. E., Smuder A. J. Effects of doxorubicin on cardiac muscle subsarcolemmal and intermyofibrillar mitochondria. Mitochondrion, Nov 2016, DOI: 10.1016

18. Powers S. K., **Morton A. B.**, Ahn B., Smuder A. J., (2016) Redox Control of Skeletal Muscle Atrophy. *Free Radical Biology and Medicine*, Feb 2016, DOI: 10.1016

19. Smuder A.J., Gonzalez-Rothi E. J., Kwon O. S., **Morton A. B.**, Sollanek K. K., Powers S. K., Fuller D. D., (2015) Cervical spinal cord injury exacerbates ventilator-induced diaphragm dysfunction. *Journal of Applied Physiology*, Oct 2015, DOI: 10.1152

20. Holland A. M., Hyatt H. W., Smuder A. J., Sollanek K. J., **Morton A. B.**, Roberts M. D., Kavazis A. N., (2015) Influence of endurance exercise training on antioxidant enzymes, tight junction proteins, and inflammatory markers in the rat ileum. *BMC Research Notes*, Sep 2015, DOI: 10.1186

21. Kwon O.S., Smuder A. J., Wiggs M. P., Hall S. E., Sollanek K. J., **Morton A. B**., Talbert E., Toklu H. Z., Tumer N., Powers S. K., (2015) AT1 Receptor blocker losartan protects against mechanical ventilation-induced diaphragmatic dysfunction. *Journal of Applied Physiology*, Sep 2015, DOI: 10.1152

22. Sollaneck K. J., Smuder A. J., Wiggs M. P., **Morton A. B**., Koch L. G., Britton S. L., Powers S. K., (2015). Role of intrinsic aerobic capacity and ventilator-induced diaphragm dysfunction. *Journal of Applied Physiology*. Jan 2015, DOI: 10.1152

23. Turley K, Eusse P, Thomas M, Townsend JR, **Morton AB**., (2015). Effects of different doses of caffeine on anaerobic exercise in boys. *Ped. Exerc. Sci*. Feb. 27 (1), 50-6.

24. Townsend, J. R., Stout, J. R., **Morton, A. B**., Jajtner, A. R., Gonzalez, A. M., Wells, A. J., Mangine, G. T., McCormack, W. P., Emerson, N. S., Robinson IV, E. H., Hoffman, J. R., Fragala, M. S., & Cosio Lima, L. (2013). Excess post-exercise oxygen consumption (EPOC) following multiple effort sprint and moderate aerobic exercise. *International Journal of Fundamental and Applied Kinesiology, 45 (1) 155-165*

25. Turley K.R., Rivas J.D., Townsend J.R., **Morton A.B.**, Kosarek J.W., and Cullum M.G. (2012). Effects of caffeine on anaerobic performance in boys. *Ped. Exerc. Sci*. (2):210-9.

Conference Proceedings: * denotes trainee, first author position is lead writer, last author position describes the corresponding author and lab director

Completed/Published

1. Naman, A.*, Kendra, J.*, Brow, R., Segal, S., **Morton, A.**, (2024) TRIM Enhances Angiogenesis in Dystrophic muscle 140 Days Post Treatment. The APS Journal (Physiology)

2. Kendra, J.*, Naman, A.*, Brow, R., Segal, S., **Morton, A.**, (2024) TRIM Enhances Angiogenesis in Dystrophic muscle 70 Days Post Treatment. The APS Journal (Physiology)

3. Kendra, J.*, Golpasandi, S.*, Naman, A.*, Othman, M., Kim, J., Rauth, R., Moustafa K., Lawler, J., **Morton, A.**, (2024) Micronized Biocompatible Ceramic Promotes Muscle Derived IL-6 Release in Disuse. (American College of Sports Medicine)

4. Golpasandi, S.*, Kendra, J.*, Naman, A.*, **Morton, A.**, (2024) Quantification of Mitochondrial Morphology in Whole Muscle. (American College of Sports Medicine)

5. Harris, D., Kendra, J.*, Pigg, Q., Golpasandi, S.*, Naman, A.*, Garcia, A., Yoshimura, D., **Morton, A.**, Janini Gomes, M., (2024) Maximal Isometric Torque in Skeletal Muscle of Endurance Trained Rats with Heart Failure. (American College of Sports Medicine)

6. Kendra J.*, Blatt R., Brow R. K., Segal S. S., **Morton A. B.**, (2023) Biomaterial Enhancement of Dystrophic Muscle. The APS Journal (Physiology)

7. **Morton A. B.**, Jacobsen N. L., Diller A., Cornelison D. D., Segal S. S., (2023) Inducible deletion of endothelial cell efnb2 attenuates neuromuscular regeneration in mouse skeletal muscle. The APS Journal (Physiology)

8. **Morton A. B.**, Jacobsen N. L., Cornelison D. D., Segal S. S., (2022) Which Comes First: Angiogenesis or Myogenesis Following Punch Biopsy Injury? The FASEB Journal 36

9. Tiper Y., **Morton A. B.**, Segal S. S., Gilbert P. M., (2022) Optimization of the Electrical Stimulation Parameters for Micro-muscles Engineered from Human Primary Myoblasts. Tissue Engineering Part A, 28. 390-391

10. **Morton A. B.**, Cornelison D. D., Segal S. S., (2020) Effective reinnervation of skeletal muscle is impaired by disrupting microvascular regeneration following acute injury. The FASEB Journal 34 (1_supplement)

11. **Morton A. B.**, Smuder A. J., Hyatt H. W., Hinkley J. M., Ichinoseki-Sekine N., Mor A., Powers S. K., (2018) Overexpression of SOD2 in the diaphragm provides partial protection against ventilator-induced diaphragm atrophy and contractile dysfunction. The FASEB Journal 32 (1_supplement), 856.15-856.15

12. **Morton A. B.**, Smuder A. J., Hall S. E., Wiggs M. P., Powers S. K., (2017) Oral administration of BGP-15 significantly increases HSP72 expression and attenuates ventilator-induced diaphragm dysfunction. The FASEB Journal 31 (1_supplement), 1021.23-1021.23

13. Turner S. M., Schuster C. M., **Morton A. B.**, Hinkley J. M., Fuller D. D., Smuder A. J., (2017) Hyperbaric oxygen treatment following mid-cervical spinal contusion injury-diaphragm outcomes. The FASEB Journal 31 (1_supplement), 873.5-873.5

14. Hinkley J. M., **Morton A. B.**, Smuder A. J., Powers S. K., (2017) Differential Expression of the Angiotensin II Type 1 Receptor Amongst Various Skeletal Muscle Types. The FASEB Journal 31 (1_supplement), 1021.2-1021.2

15. Ichinoseki-Sekine N., Yoshihara T., Tsuzuki T., **Morton A. B.**, Hinkley J. M., (2017) Intermittent Spontaneous Breathing Prevents Mechanical Ventilation-Induced Diaphragm Atrophy and Dysfunction. The FASEB Journal 31 (1_supplement), lb770-lb770

16. Smuder A.J., **Morton A. B.**, Hall S. E., Ahn B., Wiggs M. P., Wawrzyniak N. R., Powers S. K., (2016) HSP72 is required for exercise-induced protection against ventilator-induced diaphragm dysfunction. The FASEB Journal, Jan 2016 Supplement 1 volume 30.

17. **Morton A. B.**, Smuder A. J., Wiggs S. E., Hall S. E., Wawrzyniak N. R., Powers S. K., (2016) Exercise-induced protection against ventilator-induced diaphragm atrophy is dependent upon increased diaphragmatic levels of manganese superoxide dismutase. The FASEB Journal, Jan 2016 Supplement 1 volume 30.

18. Hall S. E., Smuder A. J., Wiggs M. P., **Morton A. B.**, Sollanek K. J., Powers S. K., (2016) Angiotensin II type 2 receptor contributes to ventilator-induced diaphragm dysfunction. International Journal of Exercise Science: Conference Proceedings volume 8 issue 4.

19. Turley K. R., Townsend J. R., Rivas J. D., **Morton A. B.**, Kosarak J. W., Cullum M. G., (2015) Effects of caffeine on heart rate variability in young boys: 1136 board# 8 May 28, 8:00 AM-10:00 AM. Medicine and Science in Sports and Exercise, volume 47 issue 5S.

20. Sollanek K. J., **Morton A. B.**, Smuder A. J., Burniston J. G., Powers S. K., (2015) Adaptation of the rat diaphragm in response to endurance exercise training: 1667 board # 12 May 28, 3:30 PM-5:00 PM. Medicine and Science in Sport and Exercise, volume 47 issue 5S.

21. Hall S. E., **Morton A. B.**, Smuder A. J., Wiggs M. P., Sollanek K. J., Powers. S. K., (2015) Stretch activation of angiotensin II type 1 receptor contributes to ventilator-induced diaphragm dysfunction. The FASEB Journal, Jan 2016 supplement 1 volume 29.

22. Holland A. M., Hyatt H., Smuder A. J., **Morton A. B.**, Roberts M., Kavazis A., (2015) Effects of endurance exercise training on gastrointestinal barrier. The FASEB Journal, Jan 2016 supplement 1 volume 29.

23. **Morton A. B.**, Townsend J. R., Moore H., Cosio-Lima L., (2012) A comparison of EMG activity between dumbbell bench, barbell bench, and vertical chest press. Medicine and Science in Sport and Exercise, volume 44.

24. Turley K. R., Eusse P., Thomas M., Townsend J. R., **Morton A. B.**, Phillips B. L., Cullum M. G., (2011) Effect of different doses of caffeine on anaerobic performance in young boys: 3095 board # 58 8:00 AM-9:30 AM Medicine and Science in Sport and Exercise, volume 43 issue 5.

25. Turley K. R., Townsend J. R., Rivas J. D., **Morton A. B.**, Kosarak J. W., Cullum M. G., (2010) Effect of caffeine on anaerobic performance in young boys: 1914 board # 43 June 3 8:00 AM-9:30 AM Medicine and Science in Sport and Exercise, volume 42 issue 5.

Service

Spring 2019	Reviewer for Microcirculation, Regionality: National
Summer 2019	Reviewer for Frontiers in Physiology, Regionality: National
Spring 2020	Reviewer for Royal Society of Open Science, Regionality: National
Spring 2020-Spring 2020	Committee Name/Activity: CVRD Planning Committee, Organization: University of Missouri, Service Type: University, Service Role: Committee Member, Regionality: Local
Summer 2020	Reviewer for Journal of Critical Care Research and Practice, Regionality: National
Fall 2020	Reviewer for AJP-Heart, Regionality: National
Fall 2021	Reviewer for Neural Regeneration Research, Regionality: National
Summer 2022	Reviewer for Annals of Palliative Medicine, Regionality: National
Fall 2022	Reviewer for Bosnian Journal of Basic Medical Science, Regionality: National
Fall 2022	Poster Judge: Texas Junior Academy of Science
Fall 2022	Reviewer for Biology, Regionality: National
Spring 2023	Poster Judge: Texas Junior Academy of Sciences
Spring 2023-Spring 2023	Committee Name/Activity: Graduate Student Space Committee, Organization: Texas A&M University, Service Type: Department, Service Role: Committee Member, Regionality: Local
Spring 2023-Spring 2023	Committee Name/Activity: Graduate Student Awards Committee, Organization: Texas A&M University, Service

	Type: Department, Service Role: Committee Member, Regionality: Local
Spring 2023	Reviewer for Connective Tissue Research, Regionality: National
Spring 2023-Present	Biotechnology Advising for Bioramics, Regionality: National, Role: Board Member
Summer 2023	Reviewer for eCells & Materials, Regionality: National
Fall 2023	Committee Name/Activity: TJSHS Life Science Abstract Reviewer, Organization: TJSHS, Service Type: Community, Service Role: Reviewer, Regionality: Regional
Fall 2023-Spring 2024	Committee Name/Activity: Huffines Director Search Committee, Organization: Texas A&M University, Service Type: College, Service Role: Committee Member, Regionality: Local
Spring 2024	ADM Grant Reviewer, Organization: Texas A&M University, Regionality: Local
Spring 2024	Committee Name/Activity: Undergraduate Curriculum Committee, Organization: Texas A&M University, Service Type: College, Service Role: Committee Member, Regionality: Local
Spring 2024	Committee Name/Activity: A1 Committee, Organization: Texas A&M University, Service Type: Departmental, Service Role: Committee Member, Regionality: Local
Summer 2024	Reviewer for AJP Regulatory, Integrative, and Comparative Physiology, Regionality: National
Fall 2024	Reviewer for Journal of Cachexia, Sarcopenia, and Muscle, Regionality: National
Fall 2024	Reviewer for the Journal of Physiology, Regionality: National
Fall 2024	Committee Name/Activity: Seed Grants, Organization: Texas A&M University, Service Type: Departmental, Service Role: Reviewer, Regionality: Local

Fall 2024	Committee Name/Activity: Engineering Senior Design Project Mentor, Texas A&M University, Service Type: University, Service Role: Life Science Mentor, Regionality: Local
Fall 2024	Committee Name/Activity: Senior Design Project Health Science Advisor, Organization: Department of Mechanical Engineering, Texas A&M University, Service Type: Advisor, Regionality: Local
Fall 2024	Committee Name/Activity: Targeted Proposal, Organization: Texas A&M University, Service Type: System, Service Role: Reviewer, Regionality: Local

Professional Affiliations and Memberships

2011-2014	Organization Name: NSCA, Membership Status: Former Member
2012-2014	Organization Name: NSCA, Membership Status: Former Member
2014-Present	Organization Name: American Physiological Society, Membership Status: Member
2020-Present	Organization Name: Microcirculatory Society, Membership Status: Member
2024-Present	Organization Name: ACSM, Membership Status: Member

Professional Presentations/Invited Speaker/Media

Summer 2012	Date: 2012-01-06, Presentation Title**:** A Comparison of EMG Activity Between Dumbbell Bench, Barbell Bench and Vertical Chest Press, Location (ACSM, San Francisco, CA, USA) Role: Poster Presentation: National
Spring 2015	Date: 2015-13-02, Presentation Title**:** Angiotensin II to Prevent Skeletal Muscle Atrophy, Location (Southwest ACSM, Fort Lauderdale, FL, USA) Role: Oral Presentation: National
Spring 2016	Date: 2016-05-04, Presentation Title**:** Exercise-induced protection against ventilator-induced diaphragm atrophy is dependent upon increased diaphragmatic levels of manganese superoxide dismutase, Location (Experimental Biology, San Diego, CA, USA) Role: Poster Presentation: National
Spring 2017	Date: 2017-25-04, Presentation Title**:** Oral administration of BGP-15 significantly increases HSP72 expression and attenuates ventilator-

	induced diaphragm dysfunction, Location (Experimental Biology, Chicago, IL, USA) Role: Poster Presentation: National
Summer 2017	Date: 2017-01-08, Presentation Title**:** Is SOD2 the key to exercise protection against VIDD?, Location (Seminar, Columbia, MO, USA) Role: **Invited Oral Presentation: National**
Spring 2018	Date: 2018-24-04, Presentation Title**:** Overexpression of SOD2 in the diaphragm provides partial protection against ventilator-induced diaphragm atrophy and contractile dysfunction., Location (Experimental Biology, San Diego, CA, USA) Role: Poster Presentation: National
Fall 2020	Date: 2020-10-11, Presentation Title**:** Disorganized Capillary Regeneration Coincides with Impaired Myofiber Reinnervation Following Skeletal Muscle Injury, Location (APS IPE, Online for COVID) Role: Poster Presentation: National
Fall 2021	Date: 2021-19-11, Presentation Title**:** Which comes first: angiogenesis or myogenesis following skeletal muscle injury?, Location (Health Science Research Day, Columbia, MO, USA) Role: Poster Presentation: Regional
Spring 2022	Date: 2022-26-01, Presentation Title**:** Muscle Degeneration and Regeneration: Capturing both sides of the coin to combat soft tissue injury and disease, Location (Texas A&M University, College Station, TX, USA) Role: **Invited Oral Presentation: Regional**
Spring 2022	Date: 2022-01-03, Presentation Title: Nerve Regeneration. What do the Blood Vessels Have to Say About it?**,** Location (CVRD, Columbia, MO, USA) Role**: Invited Oral Presentation: Regional**
Spring 2022	Date: 2022-03-04, Presentation Title**:** Which comes first, angiogenesis or myogenesis following biopsy punch in skeletal muscle?, Location (Experimental Biology, San Diego, CA, USA) Role: Poster Presentation: National
Fall 2022	Date: 2022-21-10, Presentation Title**:** Biomaterial Enhancement of Dystrophic Muscle, Location (Texas A&M University, College Station, TX, USA) Role: **Invited Oral Presentation: Local**
Fall 2022	Date: 2022-01-11, Presentation Title**:** Biomaterial Enhancement of Dystrophic Muscle, Location (University of Missouri, Columbia, MO, USA) Role: **Invited Oral Presentation: National**
Spring 2023	Date: 2022-03-04, Presentation Title**:** Inducible deletion of endothelial cell efnb2 attenuates neuromuscular regeneration in

	mouse skeletal muscle, Location (APS Summit, Long Beach, CA, USA) Role: Poster Presentation: National
Summer 2023	Date: 2023-03-08, Presentation Title**:** Regenerating Soft Tissue in Health and Disease, Location (Texas A&M University, College Station, TX, USA) Role: **Invited Oral Presentation: Local**
Fall 2024	Date: 2024-14-11, Presentation Title**:** Biomaterials as Drugs, the New Kids on the Block, Location (Texas A&M University, College Station, TX, USA) Role: **Invited Oral Presentation: Local**
Fall 2024	Date: 2024-02-12, Presentation Title**:** Peripheral Nerve Regeneration: What do the blood vessels have to say about it?, Location (Cooper Medical School, Camden, NJ, USA) Role: **Invited Oral Presentation: National**
Spring 2025	Date: 2025-07-2, Virtual Presentation Title: Novel Approaches to Muscle Diseases**,** Location (Stanford University, Stanford, CA, USA) Role: **Invited Oral Presentation: National**

Grants & Contracts

Title	Collaborators	Funding Agency-Sponsor	Start Date	End Date	Total Funding	Status	% Effort Contributed	Internal / External	Research $ attributed to faculty member
Mechanisms of Neurovascular Crosstalk in Skeletal Muscle Regeneration		NIH	Fall 2019	Fall 2021	$44,000.00	Not Funded	0.00	External	$44,000
Mechanisms of Neurovascular Crosstalk in Skeletal Muscle Regeneration		NIH	Fall 2019	Fall 2021	$122,836.00	Not Funded	100.00	External	$122,836
Mechanisms of Neurovascular Crosstalk in Skeletal Muscle Regeneration		APS	Fall 2019	Fall 2020	$50,000.00	Funded	100.00	External	$50,000
Mechanisms of Neurovascular Crosstalk in Skeletal Muscle Regeneration		NIH	Fall 2020	Fall 2022	$122,836.00	Not Funded	100.00	External	$122,836
Mechanisms of Neurovascular Crosstalk in Skeletal Muscle Regeneration		NIH	Fall 2020	Fall 2022	$44,000.00	Funded	100.00	External	$44,000
Enhancing Myovascular Regeneration with a Novel Biomaterial		NIH	Fall 2023	Fall 2025	$132,756.00	Not Funded	33.00	External	$132,756
Biomaterial Enhancement of Dystrophic Muscle		DoD	Fall 2023	Fall 2025	$492,422.00	Not Funded	33.00	External	$492,422
Biomaterial Enhancement of Dystrophic Muscle		NIH	Fall 2023	Fall 2025	$418,000.00	Not Funded	33.00	External	$418,000
Biomaterial Enhancement of Dystrophic Muscle		NIH	Fall 2023	Fall 2025	$33,000.00	Not Funded	0	External	$33,000
Bioactive Ceramic/Hydrogel Composites for Musculoskeletal Regeneration		DoD	Summer 2024	Summer 2027	$1,099,384.00	Not Funded	10	External	$109,938
Redox Regulation of RANKL in Duchenne Muscular Dystrophy		DoD	Summer 2024	Summer 2026	$789,092.00	Not Funded	10	External	$78,909

Inducing mammalian limb regeneration with FGF2 and BMP2		NIH	Summer 2024	Summer 2029	$2,957,856.00	Not Funded	10	External	$295,785
Micronized Bioactive Ceramic Particles for Treatment of Limb Girdle Muscle Dystrophy		NIH	Summer 2024	Summer 2029	$2,305,500.00	Not Funded	33	External	$2,305,500
Redox Regulation of RANKL in Duchenne Muscular Dystrophy		NIH	Fall 2024	Fall 2029	$3,672,231.00	Not Funded	10	External	$367,223
Effectiveness and Toxicology of Dystrophix in a Large Animal Model of Muscle Dystrophy		TAMU System	Fall 2023	Fall 2025	$495,972	Funded	32.9	Internal	$247,986
Micronized Ceramic Mitigation of Unloading-induced Atrophy in Skeletal Muscle: Mechanotransductive Mechanisms		NASA	Spring 2025	Spring 2026	$149,903.00	Submitted	10	External	$14,930
Regulation of Ghrelin Receptor-Mediated Inflamm-aging and Sarcopenia		NIH	Summer 2025	Summer 2030	$3,636,530.00	Submitted	10	External	$363,653
Adversarial Role of RANKL and SIRT1 in Unloading-induced Atrophy of Skeletal Muscles		NIH	Summer 2025	Summer 2030	$3,704,613.00	Submitted	10	External	$370,461
TRIM/Hydrogel Composites for Connective Tissue Regeneration and Hypertrophy		DoD	Summer 2025	Summer 2029	$1,699,524.00	Submitted	10	External	$169,952
Time Release Ion Matrix (CoO-TRIM) Material to Promote Therapeutic Delivery in DMD		DoD	Summer 2025	Summer 2027	$517,562.00	Submitted	20	External	$517,562
Determining Sex- and Cell-Specific Differences in Composite Tissue Regeneration Following Projectile Injury		DoD	Fall 2025	Fall 2028	$749,979.00	Submitted	19	External	$749,979
Determining cell-specific mechanisms that drive aberrant neuromuscular		NIH	Fall 2025	Fall 2030	$1,828,395.00	Submitted	25	External	$1,828,395

regeneration in Down Syndrome									
Contribution of Neurovascular Signaling in Sex-Dependent Toxicity from Chemotherapy		NIH	Spring 2026	Spring 2031	$1,874,925.00	Submitted	25	External	$1,828,395