

1. Emily Louise Haag
2. 1211 Vera Lane  
Kennedale, TX 76060

3. Academic Background
  - a. Education

Doctor of Philosophy (May 2023)  
Applied Physiology and Biomechanics  
Southern Methodist University  
Dallas, Texas

Master of Education (May 2016)  
Kinesiology  
Bowling Green State University  
Bowling Green Ohio

Bachelor of Science in Education (August 2014)  
Exercise Science  
Bowling Green State University  
Bowling Green Ohio

- b. Professional Certifications

National Strength and Conditioning Association, Certified Strength and Conditioning Specialist

- c. Present rank

Assistant Professor

- d. Year of appointment to the University and rank

August 2023                      Visiting Lecturer

- e. Year of last promotion

August 2024                      Assistant Professor

- f. Previous teaching and/ or research positions

June 2023, 2024, Southern Methodist University, Adjunct Faculty, part-time

June 2018-June 2023, Southern Methodist University, Graduate Research/ Teaching Assistant, part-time

August 2016- May 2018, Bowling Green State University, Adjunct Faculty, part-time

g. Previous professional positions

May 2016- May 2018, Bowling Green State University, Assistant Director of Strength & Conditioning, full-time

h. Formal continuing education associated with professional development

AI custom training custom workshop, Rebecca Putnam, Koehler Center, TCU, 1/9/2026

Nearpod Virtual professional learning for APHS, Nearpod corporate trainer, virtual, Fort Worth, TX, 1/8/2026

Prep less teach more ten essential AI prompts for an easier semester, Rebecca Putnam, TCU innovation network Koehler center (1/7/2026)

American Society of Biomechanics, Annual Meeting, Pittsburgh, PA, (8/14-8/16/2025)

South Central American Society of Biomechanics, Fort Worth, TX, (4/4-4/5/2025)

Bias and Inclusion Training, Lynita Yarbrough, Harris College Community Advocate, TCU, (2/25/2025)

NIH/NSF Workshop Writing Winning Proposals, Office of Sponsored Programs, TCU (12/5/2024)

Internal Grants Workshop, Office of Sponsored Programs, TCU (11/13/2024)

Building A Better Budget Workshop, Office of Sponsored Programs, TCU (10/3/2024)

i. Honors and Awards

Named Co-director, Locomotor Performance Laboratory, TCU (November 2024)

4. Teaching

a. Courses taught

HLTH 30203, Health & Stress Management (Fall, 2025, Spring, 2025, Fall 2024, Spring 2024, Fall 2023)

HCHS 20003, Global Healthcare Systems (Spring 2024)

HLTH 20203, Health & Wellness Concepts (Fall 2023, Spring 2024, Summer 2024)

HCHS 10003, Survey of Allied Health Professions (Fall 2023)

Bowling Green State University

APSM 3322, Functional Biomechanics

APSM 3321, Biomechanics

APSM 2441, Anatomy & Physiology I & Lab

APSM 2442, Anatomy & Physiology II Lab

EXSC 2390 Applied Sport Science

EXSC 3870 Introductory Internship

EXSC 4890 Capstone Internship

b. Courses developed at TCU

APHS 30323, Consumer Health

APHS 30201, Foundations of Health Behavior and Health Promotion (proposed)

c. Honors projects directed, or committee service

None

d. Graduate theses and dissertations direction, or committee service

None

e. External support received or pending for academic work

None

f. Internal support for academic work received

None

g. Academic advising

Advised 5 Health Science students for spring 2026 enrollment.

5. Research and creative activity

a. Refereed publications

**Haag, E. L., & Weyand, P. G. (2025)** Sex performance differences in vertical and horizontal jumping. *Royal Society Open Science*, <https://doi.org/10.1098/raos.241920>

Mason, J., Starc, L., Morin, J. B., **McClelland, E. L., & Zech, A. (2024)**. Can the recent sex-specific evolutions in elite running performances be attributed to advanced footwear technology?. *Frontiers in Sports and Active Living*, 6, 1386627. <https://doi.org/10.3389/fspor.2024.1386627>

**McClelland, E. L., & Weyand, P. G. (2022)**. Sex differences in human running performance: smaller gaps at shorter distances?. *Journal of Applied Physiology*, 133; 876-885. <https://doi.org/10.1152/jappphysiol.00359.2022>

Weyand, P. G., Brooks, L. C., Prajapati, S., **McClelland, E. L., Hatcher, S. K., Callier, Q. M., & Bundle, M. W. (2022)**. Artificially long legs directly enhance long sprint running performance. *Royal Society Open Science*, 9(8), <https://doi.org/10.1098/rsos.220397>

b. Non-refereed publications

**McClelland, E. L., Prajapati, S. K., & Weyand, P. (2022)**. Quantifying Getting High Under One's Own Power—A Comparison of Vertical Jump Height Measurement Methods. In *International Journal of Exercise Science: Conference Proceedings* (Vol. 2, No. 14, p. 53).

**McClelland, E., & Weyand, P. (2021)**. Cutting Sex-Performance Differences Down to Size: Are Females Closer to Males in Shorter Sprint Races?. *ISBS Proceedings Archive*, 39(1), 352.

**McClelland, E., & Weyand, P. (2020)**. Any Olympic jump that women can do, men can do nearly 20% better. *ISBS Proceedings Archive*, 38(1), 120.

c. Materials or activities accepted or scheduled but not yet printed, released, or presented

**Haag, E. L., & Weyand, P. G.** Height or hops: why do female hoopsters rarely dunk?. *Journal of Biomechanics*. (In preparation).

Howrey A., & **Haag, E. L.** Jump height measurement techniques: what are we measuring any that matters for performance training. *Journal of Applied Biomechanics*. (In preparation).

**Haag, E. L.**, & Weyand, P. G. Athletes with altitude: the mechanical basis of countermovement jump performance for sprint swimming. *Journal of Applied Physiology*. (In preparation).

Hughes, P. H., & **Haag, E. L.** Sex differences in stroke forces explain gaps in swimming performance. *Journal of Applied Physiology*. (In preparation).

d. Papers presented, participation on panels, etc.

American Society of Biomechanics, 2025, Annual Meeting, Pittsburgh, PA, Poster Presentation “Sex Performance Differences in Vertical and Horizontal Jumping.”

American Society of Biomechanics, 2023 South Central Regional Meeting, Fort Worth, TX, Oral Presentation: “Sex Differences in Jumping Performance: Does Gravity Leave Females More Grounded?”

American College of Sports Medicine, 2022 Texas Regional Conference, Waco, TX, Poster Presentation: “Quantifying Getting High Under One’s Own Power: a Comparison of Vertical Jump Higher Measurement Methods”

International Society of Biomechanics in Sport, 2022, International Conference, virtual, Canberra, Australia, Oral Presentation, “Cutting Sex-Performance Differences Down n to Size: Are Females Closer to Males in Shorter Sprint Races?”

International Society of Biomechanics in Sport, 2021, International Conference, Virtual, Liverpool, UK, Oral Presentation: “Any Olympic Jump That Women Can Do, Men Can Do Nearly 20% Better”

American Society of Biomechanics, 2020, South Central Regional Meeting, Plano, TX, Oral Presentation: “Running Before Jumping: How Much More Height for Run-in vs Standing Vertical Jumps?”

American Society of Biomechanics, 2020, South Central Regional Meeting, Plano, TX, Oral Presentation: “Getting High Under Your Own Power: The Mechanical Determinants of Vertical Jumping Performance”

e. Editorships, consulting, adjudications

Peer Reviewer, Healthcare, December 2025

Peer Reviewer, International Journal of Environmental Research & Public Health, October 2025

Peer Reviewer, Journal: Disabilities, January 2025

Peer Reviewer, Medicine & Science in Sport & Exercise, January, July 2025

f. External support received or pending

Co-I, R15 NIH- NIAMS, - Sex differences in patellar and Achilles tendon structure and Loading: An integrated ultrasound, DEXA, and biomechanical study, (In preparation, June 2026)

Co-I, R01 NIH - NIAMS, Do clinically utilized return to play tests relate to the determinants of running, jumping performance, and health?, (In preparation, October 2026)

Co-PI, Nike, Spiked footwear testing (awarded, Pending, \$108,887.50)

g. Internal grants received

RCAF-Junior Faculty Summer Research Supplement, "Understanding sex differences in motion-based determinants of jumping performance, (awarded, \$6,000 salary, 6/1/2025-5/31/2026)

Fairress Simmons Doctoral Fellowship, SMU (2018-2023)

h. Other research or creative activities not included in any of the above

None

6. Service

a. Departmental service

Applied Health Sciences Curriculum Committee (fall 2024-present)

b. College service

Member, Search committee for Assistant Professor of Occupational Therapy (spring, 2025)

Member, Search committee for APHS Chair (2024-2025)

c. University service

None

d. Community activities directly related to professional skills

Guest lecture, TCU AFROTC DET 845 Leadership Lab,  
“Muscular fitness: The basics.” (8/29/2025)

e. Professional service

American Society of Biomechanics (member)

South Central American Society of Biomechanics, Annual meeting planning committee  
(2025-2026)

American College of Sports Medicine (Member)

National Strength and Conditioning Association (Member)

International Society for Biomechanics in Sport (Member)

f. Academic Advising

see above

g. Other service activity not included in any of the above

None