

Sauyeh Kathleen Zamani, Ph.D.

Dallas, TX | sauyeh.zamani@gmail.com

Education

Ph.D. in Integrative and Applied Physiology

University of Texas at Arlington | Department of Kinesiology | 2019–2024

- Dissertation: *Pathophysiologic Consequences of Pericardial Fat Assessed by Magnetic Resonance Imaging*

M.S. in Exercise Science

University of Texas at Arlington | Department of Kinesiology | 2017–2019

- Thesis: *Diastolic Dysfunction in Women with Ischemia and No Obstructive Coronary Artery Disease: Novel Insights from Left Atrial Feature Tracking*

B.S. in Exercise Science

University of Texas at Arlington | Department of Kinesiology | 2010–2014

Certifications

- Basic Life Support (BLS), American Heart Association, Valid through 2028

Honors and Awards

- Inaugural International Research Travel Fund Award, Midwestern State University, 2026
- Ph.D. Dissertation Fellowship, University of Texas at Arlington, 2024
- Certificate of Distinction, University of Texas at Arlington, 2024
- Lyla Lobdell POTS Departmental Scholarship, University of Texas at Arlington, 2023
- Best Poster Presentation Award, Canadian Women's Heart Health Summit, Vancouver, Canada, 2023
- Best Poster Presentation Award, Kinesiology Graduate Research Day, University of Texas at Arlington, 2019
- Dean's Scholarship, University of Texas at Arlington, 2010–2011

Professional Experience

Academic and Leadership Experience

Assistant Professor of Exercise Physiology (Tenure-Track) and Graduate Coordinator

Midwestern State University, Wichita Falls, TX | Aug 2025–Present

- Developed and delivered student-centered exercise physiology and exercise science courses emphasizing engagement, critical thinking, and applied learning.
- Established a research program in cardiovascular physiology and exercise science focused on advancing investigations and collaborative opportunities.
- Contributed to university service through committee participation, professional initiatives, and campus engagement activities.
- Coordinated graduate program operations, including admissions, student advising, degree progression, curriculum planning, and faculty coordination.
- Engaged with graduate students and prospective applicants as a primary point of contact, providing guidance on program requirements, academic progression, and research opportunities.
- Collaborated with faculty and university leadership to evaluate applicants, resolve student issues, support recruitment, and facilitate timely degree completion.

Assistant Professor of Exercise Science (Tenure-Track)

Georgia College & State University, Milledgeville, GA | Aug 2024–Aug 2025

- Developed and delivered exercise science courses using evidence-based teaching strategies to promote student engagement and learning.
- Established a cardiovascular physiology and exercise science research program to support scholarly activities and student research opportunities.
- Contributed to university service through academic engagement initiatives, campus events, and departmental activities.

Adjunct Lecturer of Exercise Science

Texas Wesleyan University, Fort Worth, TX | Aug 2023–Dec 2023

- Developed and delivered lecture and laboratory course materials, including syllabi, lesson plans, assignments, quizzes, and examinations aligned with course objectives.
- Implemented active learning strategies, including student presentations and guided discussions, to enhance critical thinking and scientific communication skills.
- Incorporated visual learning approaches, including original illustrations and multimedia resources, to improve understanding of complex physiological concepts.

Clinical Research Experience

Director, Health Assessment and Rehabilitation Training (HART) Laboratory

Midwestern State University, Wichita Falls, TX | Aug 2025–Present

- Established and direct a cardiovascular clinical research laboratory focused on exercise physiology, clinical assessment, and rehabilitation science.

Graduate Research Assistant

University of Texas at Arlington | Aug 2017–Jun 2024

Sponsored Research Projects:

- *Mechanisms of Exercise Intolerance in Heart Failure with Preserved Ejection Fraction: Precision Therapy Based on Patient-Specific Pathophysiology* (NIH P01HL137630)
- *Functional Myocardial Ischemia as a Mechanism of Diastolic Dysfunction in Women with Coronary Microvascular Dysfunction* (AHA16SDG27260115)

Independent Clinical Research Responsibilities:

- Conducted NIH- and AHA-funded human clinical research involving research participants with cardiovascular disease.
- Coordinated participant recruitment, participant visits, and clinical research activities in accordance with approved study protocols and institutional requirements.
- Performed advanced cardiac MRI acquisition, MRI analysis, and quality assessment using Circle Cardiovascular Imaging and Myocardial Tagging software.
- Managed clinical research data, maintained clinical data quality and data integrity, and developed data management workflows to support accurate analysis and reporting.
- Collaborated with physicians, radiologists, engineers, and multidisciplinary clinical research teams to ensure research compliance, protocol adherence, and successful clinical study execution.
- Prepared clinical research documentation, analyzed study data using statistical analysis, and contributed to peer-reviewed publications, scientific presentations, and grant applications.
- Maintained IRB submissions and ensured compliance with HIPAA regulations, institutional policies, and ethical standards for clinical research.
- Secured a \$4,000 competitive pilot research grant from the University of Texas at Arlington to support supplemental data collection and exploratory studies within an NIH- and AHA-funded cardiovascular research program.

Healthcare and Client Relations Experience

On-Call Medical Interpreter (Farsi/Persian)

Prisma International Corporation | Sep 2022–Present

- Provided accurate medical interpretation services to facilitate communication between healthcare providers and patients with limited English proficiency.
- Supported culturally responsive healthcare delivery by bridging linguistic and communication barriers.

Cardiac Stress Monitoring Specialist Intern

Texas Health Heart and Vascular Specialists, Fort Worth, TX | Aug 2018–Dec 2018

- Assisted with cardiovascular diagnostic testing, including treadmill stress testing, nuclear stress testing, Holter monitoring, cardiac PET imaging, tilt-table testing, and 12-lead electrocardiography.
- Prepared comprehensive test reports to support physician interpretation and clinical decision-making.

Cardiovascular Fitness Assessment Specialist Intern

University of Texas at Arlington | Jan 2014–May 2014

- Conducted cardiovascular fitness, body composition, strength, endurance, flexibility, and submaximal exercise assessments.
- Provided individualized fitness evaluations and supported client assessment operations.

Business Owner and Operations Manager

Gizlar Group LLC, Arlington, TX | Jan 2010–Aug 2022

- Managed business operations, financial planning, budgeting, inventory, and regulatory compliance.
- Oversaw financial reporting, expense tracking, and operational improvements to enhance efficiency and revenue growth.
- Developed customer engagement strategies and maintained long-term professional partnerships.

Grants and Funding

- **Principal Investigator**, Midwestern State University Intramural Research Grant, *Novel Cardiac Rehabilitation Exercises in Preventing Heart Failure Progression*, Funding Period: Dec 2026–Jul 2027, Award: \$10,000
- **Principal Investigator**, Midwestern State University Intramural Teaching Pilot Grant, *Enhancing Cardiovascular Physiology Learning Through AI-Accountable Redesign of Conceptual Drawing-Based Instruction (EXPH 1904)*, Funding Period: Aug 2026–Dec 2026, Award: \$500
- **Principal Investigator**, Georgia College & State University Academic Affairs Small Grant, *Novel Cardiac Rehabilitation Exercises in Preventing Heart Failure Progression*, Funding Period: Mar 2025–Oct 2025, Award: \$5,000
- **Principal Investigator**, University of Texas at Arlington College of Nursing and Health Innovation (CONHI) CRS Pilot Grant, *Lung Water Accumulation and Ventricular Interaction as Mechanisms of Exercise Intolerance in HFpEF*, Funding Period: Aug 2021–Aug 2022, Award: \$4,000

Teaching Experience

Midwestern State University

- EXPH 6983, Thesis (3 credits), Graduate, Spring 2026–Fall 2026
- EXPH 5003, Research and Design (3 credits), Graduate, Fall 2026
- EXPH 5033, Clinical Exercise Physiology: Chronic Diseases (3 credits), Graduate, Spring 2026
- EXPH 6103, Research Independent Study (3 credits), Graduate, Spring 2026
- EXPH 5073, Graduate Topics in Exercise Physiology (3 credits), Graduate, Spring 2026–Fall 2026
- EXPH 6003, Graduate Internship in Exercise Physiology (3 credits), Graduate, Spring 2026
- EXPH 4701, Exercise Physiology Clinical Assessment Laboratory (1 credit), Spring 2026
- EXPH 6013, Myocardial Physiology and ECG Analysis (3 credits), Graduate, Fall 2025
- EXPH 2501, Physiology of Sport and Fitness Laboratory (3 credits), Fall 2025–Fall 2026
- EXPH 1904, Introduction to Exercise Physiology (3 credits), Fall 2025–Fall 2026
- EXPH 1904, Introduction to Exercise Physiology Laboratory (1 credit), Fall 2025–Fall 2026

Georgia College & State University

- KINE 6653, Graduate Sport Nutrition (3 credits, Online), Graduate, Summer 2025
- KINE 4233, Clinical Exercise Physiology (3 credits, Online), Spring 2025–Summer 2025
- KINE 3203, Physiology of Exercise (3 credits), Fall 2024–Summer 2025
- KINE 3262, Exercise Testing (3 credits), Fall 2024–Spring 2025
- KINE 4253, Applied Research in Exercise Science (3 credits), Fall 2024–Spring 2025

Texas Wesleyan University

- KINE 4311, Physiology of Exercise (3 credits), Fall 2023
- KINE 4111, Physiology of Exercise Laboratory (1 credit), Fall 2023

Professional Services

- **Student Academic Advisor**, Midwestern State University, Jan 2026–Present
- **Thesis Committee Member**, 6 M.S. Thesis Committees, Midwestern State University, Sep 2025–Present
- **Committee Member**, Athletics Committee, Midwestern State University, Sep 2025–Present
- **Proposal Reviewer**, EURECA (Enhancing Undergraduate Research Endeavors and Creative Activities) Undergraduate Research Grant Competition, Midwestern State University, Jul 2026
- **Evaluator**, Undergraduate Research and Creative Activities Forum, Midwestern State University, Nov 2025
- **Judge**, Annual State K–5 Science Fair, Georgia College & State University, Mar 2025
- **Interviewer**, President’s Scholarship Competition, Georgia College & State University, Dec 2024
- **Exercise Science Program Representative**, Academic Expo, Georgia College & State University, Sep 2024
- **Poster Presentation Abstract Reviewer**, Kinesiology Undergraduate Research Day, The University of Texas at Arlington, Apr 2022

- **Ad Hoc Reviewer**, *American Journal of Cardiology*, 2021
- **Ad Hoc Reviewer**, *American Journal of Physiology–Heart and Circulatory Physiology*, 2020
- **Poster Presentation Abstract Reviewer**, Kinesiology Undergraduate Research Day, The University of Texas at Arlington, Nov 2019
- **Ad Hoc Reviewer**, *Journal of Clinical Medicine*, 2019

Professional Development

- Leadership Academy, 6-Session Leadership Development Program, Midwestern State University, 2026.
- Quality Matters: Improving Your Online Course, Georgia College & State University, May 2025
- Incorporating Transformative Experiences in the Classroom, Georgia College & State University, May 2025
- Learn How the American Heart Association Fights for Your Health and How Your Involvement Makes a Difference, Georgia College & State University, Oct 2024
- Fundamentals of Physiology, Certificate of Achievement, Harvard Medical School, 2021

Manuscripts

- 1) **Zamani SK**, Zaha VG, Babb TG, Sarma S, MacNamara JP, Haykowsky MJ, Levine BD, Thompson RB, Nelson MD. Evaluation of Exercise-Induced Changes in Lung Water Density in Heart Failure with Preserved Ejection Fraction. *In Preparation*.
- 2) **Zamani SK**, Anderson G, Robuck E, Bartlett MF, Mireles J, Tetrack D, Kao Y, Haykowsky MJ, Sarma S, Macnemera J, Berry J, Pandey A, Levine BD, Zaha VG, Nelson MD. Impaired systolic reserve in heart failure with preserved ejection fraction: An exercise cardiac magnetic resonance imaging study. *In Preparation*.
- 3) **Zamani SK**, Zaha VG, Haykowsky MJ, Nelson MD. Pericardial Fat Across the Spectrum of Health and Disease. *In Preparation*.
- 4) Oliveira-Gomes D, Brazile TL, Wakeham DJ, MacNamara JP, Hearon CM, **Zamani SK**, Nelson MD, Levine BD, Sarma S. Effects of epicardial adipose tissue on cardiac function and exercise hemodynamics in patients with Heart Failure with Preserved Ejection Fraction. *J Cardiac Failure - Intersections*. 2026. doi:[10.1016/j.jycafi.2026.01.008](https://doi.org/10.1016/j.jycafi.2026.01.008).
- 5) Bartlett MF, Oneglia AP, Davis D, **Zamani SK**, Siddiqui A, Ricard MD, Nelson MD. Maximal-effort knee-extension exercise impairs skeletal muscle oxidative capacity and VO₂ recovery in vivo. *J Appl Physiol*. 139(5):1073-1089, 2025. doi:[10.1152/jappphysiol.00517.2025](https://doi.org/10.1152/jappphysiol.00517.2025).
- 6) Wakeham DJ, **Zamani SK**, Oneglia AP, Howrey MM, Majeed S, Brazile TL, Beckman JA, MacNamara JP, Haykowsky MJ, Zaha VG, Levine BD, Hearon CM, Sarma S, Nelson MD. Circumferential strain and strain rates of the descending aorta as novel measures of aortic stiffness and wall mechanics from standard cardiac MRI. *Exp Physiol*. 111(1):36-42, 2025. doi:[10.1113/EP092585](https://doi.org/10.1113/EP092585).
- 7) **Zamani SK**, Wei J, Hathorn B, Robuck E, Kwan AC, Pepine CJ, Handberg E, Cipher DJ, Dey D, Bairey Merz CN, Nelson MD. Impact of epicardial fat on coronary vascular function, cardiac morphology, and cardiac function in women with suspected INOCA. *Eur Heart J*. 25(10):1360-1366, 2024. doi:[10.1093/ehjci/jeae203](https://doi.org/10.1093/ehjci/jeae203).
- 8) Paquin A, Nelson MD, Wei J, **Zamani SK**, Maughan J, Cook-Wiens G, Gulati M, Shufelt C, Petersen JW, Handberg EM, Pepine CJ, Bairey Merz CN. Is There an Association Between Coronary Microvascular Dysfunction and Right Ventricular Size and Function? *JACC*. 83(13):1171, 2024. doi:[10.1016/S0735-1097\(24\)03161-9](https://doi.org/10.1016/S0735-1097(24)03161-9).
- 9) Nelson MD, Gomez-Arnold JM, Wei J, Lauzon M, **Zamani SK**, Maughan J, Obrutu O, Shufelt C, Handberg E, Pepine CJ, Bairey Merz CN. Contributors to high left ventricular ejection fraction in women with ischemia and no obstructive coronary artery disease: Results from the women's ischemia syndrome evaluation-coronary vascular dysfunction (WISE-CVD) study. *Am Heart J*. 278(2):41-47, 2024. doi:[10.1016/j.ahj.2024.08.021](https://doi.org/10.1016/j.ahj.2024.08.021).
- 10) **Zamani SK**, Sarma S, MacNamara JP, Hynan LS, Haykowsky MJ, Hearon CM, Wakeham DJ, Brazile T, Levine BD, Zaha VG, Nelson MD. Excess pericardial fat is related to adverse cardio-mechanical interaction in heart failure with preserved ejection fraction. *Circulation*. 148(18):1410-1412, 2023. doi:[10.1161/CIRCULATIONAHA.123.065909](https://doi.org/10.1161/CIRCULATIONAHA.123.065909).
- 11) Oneglia AP, **Zamani SK**, Bartlett MF. Shear stress-induced flow mediated dilation: Is it up to hemoglobin? *J Physiol*. 598(24):5609-5610, 2020. doi:[10.1113/JP280649](https://doi.org/10.1113/JP280649).
- 12) **Zamani SK**, Samuel TJ, Wei J, Thomson LE, Tamarappoo BK, Sharif B, Bairey Merz CN, Nelson MD. Left atrial stiffness in women with ischemia with no obstructive coronary artery disease: Novel insight from left atrial feature tracking. *Clin Cardiol*. 43(9):986-992, 2020. doi:[10.1002/clc.23395](https://doi.org/10.1002/clc.23395). **Featured in Daily Edition of DocWire News.**

Abstracts

- 1) Hathorn B, **Zamani SK**, Webb R, Grant C, Pixler L, Ashari N, Wang J, Zaha VG, Nelson MD. Lower body negative pressure recapitulates upright posture during supine exercise cardiac magnetic resonance imaging. *ISMRM*. 2025. Presented in Hawaii, Honolulu.
- 2) **Zamani SK**, Wei J, Hathorn B, Robuck E, Kwan AC, Pepine CJ, Handberg E, Cipher DJ, Dey D, Bairey Merz CN, Nelson MD. Epicardial fat is associated with adverse ventricular remodeling and diastolic dysfunction in women with ischemia but no obstructive coronary artery disease. Women's Cardiovascular and Brain Health Symposium. *University of North Texas Health Science Center, Women's Cardiovascular and Brain Health Symposium*. 2024. Presented in Fort Worth, Texas.
- 3) Oliveira-Gomes D, Brazile TL, MacNamara JP, **Zamani SK**, Hearon CM, Wakeham DJ, Nelson MD, Levine BD, Sarma S. Effects of epicardial adipose tissue on cardiac function and exercise hemodynamics in patients with Heart Failure with Preserved Ejection Fraction. *Circulation*. 150 (S1), 2024. doi:[10.1161/circ.150.suppl_1.4143816](https://doi.org/10.1161/circ.150.suppl_1.4143816). Presented in Chicago, Illinois.
- 4) **Zamani SK**, Zaha VG, Sarma S, MacNamara JP, Wakeham DJ, Hearon CM, Haykowsky MJ, Levine BD, Nelson MD. Exercise cardiac magnetic resonance imaging in heart failure with preserved ejection fraction. *European Journal of Preventive Cardiology*. 31 (S1), 2024. doi:[10.1093/eurjpc/zwae175.179](https://doi.org/10.1093/eurjpc/zwae175.179). Presented in Athens, Greece.
- 5) Hathorn B, **Zamani SK**, Zaha VG, Babb T, Hussain T, Haykowsky MJ, Levine BD, Zia A, Grodin JL, Nelson MD. Exercise cardiac magnetic resonance imaging across the lifespan. *European Journal of Preventive Cardiology*. 31 (S1), 2024. doi:[10.1093/eurjpc/zwae175.177](https://doi.org/10.1093/eurjpc/zwae175.177). Presented in Athens, Greece.
- 6) Paquin A, Nelson MD, Wei J, **Zamani SK**, Maughan J, Cook-Wiens G, Gulati M, Shufelt Ch, Petersen JW, Handberg EM, Pepine CJ, Bairey Merz CN. Is there an association between coronary microvascular dysfunction and right ventricular size and function. *JACC*. 83 (13S), 2024. doi:[10.1016/S0735-1097\(24\)03161-9](https://doi.org/10.1016/S0735-1097(24)03161-9). Presented in Atlanta, Georgia.
- 7) Ranasinghe S, Szczepaniak L, Nelson MD, Cui Y, **Zamani SK**, Oneglia AP, Hathorn B, Muhyieddeen A, Obrutu O, Maughan J, Kwan AC, Li D, Bairey Merz CN, Wei J. Myocardial steatosis in women with ischemia and no obstructive coronary arteries. *JACC*. 83 (13S), 2024. doi:[10.1016/S0735-1097\(24\)03467-3](https://doi.org/10.1016/S0735-1097(24)03467-3). Presented in Atlanta, Georgia.
- 8) **Zamani SK**, Robuck E, Wei J, Kwan AC, Pepine CJ, Handberg E, Cipher DJ, Dey D, Bairey Merz CN, Nelson MD. Epicardial fat is associated with adverse ventricular remodeling and diastolic dysfunction in women with ischemia but no obstructive coronary artery disease. *Eur Heart J*. 44(2S), 2023. doi:[10.1093/eurheartj/ehad655.2533](https://doi.org/10.1093/eurheartj/ehad655.2533). Presented in Netherland, Amsterdam.
- 9) **Zamani SK**, Anderson G, Palmero Canton A, Bartlett MF, Tetrack T, Kao Y, Nelson MD. Metabolic Cost and Reproducibility of Exercise Cardiac Magnetic Resonance Imaging. *Medicine & Science in Sports & Exercise*. 55(9S): 194-194, 2023. doi:[10.1249/01.mss.0000981532.53698.b9](https://doi.org/10.1249/01.mss.0000981532.53698.b9). Presented in Denver, Colorado.
- 10) **Zamani SK**, Mireles JD, Shrestha M, Wei J, Kao Y, Handberg EM, Pepine CJ, Thompson RB, Bairey Merz CN, Nelson MD. Increased Left Ventricular Ejection Fraction in Women with Ischemia but no Obstructive Coronary Artery Disease: Novel insight from strain imaging. *Canadian Journal of Cardiology*. 39(5): S9, 2023. doi:[10.1016/j.cjca.2023.02.046](https://doi.org/10.1016/j.cjca.2023.02.046). Presented in Vancouver, Canada. **Best Poster Presentation Award**.
- 11) **Zamani SK**, Zaha VG, Sarma S, Levine BD, Nelson MD. Paracardial fat is related to adverse ventricular interdependence in heart failure with preserved ejection fraction. *University of Penn Medicine*. 2023. Presented in Philadelphia, Pennsylvania: Oral Presentation for the Young Investigator Competition.
- 12) Wakeham DJ, **Zamani SK**, Howrey MM, Majeed S, Brazile TL, MacNamara JP, Levine BD, Hearon Jr CM, Sarma S, Nelson MD. Descending Aortic vascular strain as a novel measure of arterial stiffness attainable from Cardiac MRI. *North American Artery*. 2023. Presented in Iowa, Iowa.
- 13) Bartlett MF, Palmero-Canton A, Oneglia AP, Anderson GK, **Zamani SK**, Mireles J, Requilme R, Ricard MD, Nelson MD. Evidence of Mitochondrial Uncoupling in Human Quadriceps during All-Out Knee Extension Exercise. *Integrative Physiology of Exercise*. 2022. Presented in Baltimore, Maryland.
- 14) **Zamani SK**, Aldiwani H, Razipour A, Wei J, Kwan AC, Berman DS, Dey D, Bairey Merz CN, Nelson MD. Pericardial fat from a single horizontal long axis cardiac magnetic resonance cine image: a validation study against three-dimensional cardiac computed tomography. *Eur Heart J*. 43(2S), 2022. doi:[10.1093/eurheartj/ehac544.223](https://doi.org/10.1093/eurheartj/ehac544.223). Presented in Barcelona, Spain.
- 15) **Zamani SK**, Zaha VG, Sarma S, MacNamara JP, Haykowsky MJ, Jaffery MF, Ricard MD, Levine BD, Nelson MD. Pericardial fat is adversely related to cardio-mechanical interaction in heart failure with preserved ejection fraction: implications for exercise intolerance. *Eur Heart J*. 43(2S), 2022. doi:[10.1093/eurheartj/ehac544.782](https://doi.org/10.1093/eurheartj/ehac544.782). Presented in Barcelona, Spain: Oral Presentation.

- 16) **Zamani SK**, Zaha VG, Jaffery MF, Babb TG, Sarma S, MacNamara JP, Levine BD, Thompson RB, Nelson MD. Evaluation of Exercise-Induced Changes in Lung Water Density in Heart Failure with Preserved Ejection Fraction. *Faseb J.* 36(1S), 2022. doi:doi.org/10.1096/fasebj.2022.36.S1.R3301. Presented in Philadelphia, Pennsylvania.
- 17) **Zamani SK**, Wei J, Kwan AC, Berman DS, Shufelt C, Bairey Merz CN, Nelson MD. Longitudinal changes in cardiac morphology and function in women with INOCA: Results from repeat magnetic resonance imaging a median of 6 years apart. *Eur Heart J.* 42(1S), 2021. doi:[10.1093/eurheartj/ehab724.0228](https://doi.org/10.1093/eurheartj/ehab724.0228). Presented Virtually due to Covid-19.
- 18) **Zamani SK**, Samuel TJ, Wei J, Thomson LE, Tamarappoo BK, Bairey Merz CN, Nelson MD. Diastolic dysfunction in women with ischemia and no obstructive coronary artery disease: Novel insight from left atrial feature tracking. *University of North Texas Health Science Center, Women's Cardiovascular and Brain Health Symposium.* 2020. Presented in Fort Worth, Texas: Oral presentation.
- 19) **Zamani SK**, Samuel TJ, Wei J, Thomson LE, Tamarappoo BK, Bairey Merz CN, Nelson MD. Diastolic dysfunction in women with ischemia and no obstructive coronary artery disease: Novel insight from left atrial feature tracking. *University of Texas at Arlington, Research Day.* 2019. Presented in Arlington, Texas: **Best Poster Presentation Award.**
- 20) **Zamani SK**, Samuel TJ, Wei J, Thomson LE, Tamarappoo BK, Bairey Merz CN, Nelson MD. Diastolic dysfunction in women with ischemia and no obstructive coronary artery disease: Novel insight from left atrial feature tracking. *Eur Heart J.* 40(S):1666, 2019. doi:[10.1093/eurheartj/ehz748.1032](https://doi.org/10.1093/eurheartj/ehz748.1032). Presented in Paris, France.

Invited Presentations

- *Enhancing Cardiovascular Physiology Learning Through AI-Accountable Redesign of Conceptual Drawing-Based Instruction.* Celebration of Scholarship, Midwestern State University, April 2027.
- *Pathophysiologic consequences of pericardial fat assessed by magnetic resonance imaging.* New Voices Research Symposium, University of Texas at Arlington, April 2024.

Student Mentorship

- **Biswash Upadhyaya** (2026–Present) and **Maverick Moxey** (2025–Present), M.S. Students & Graduate Teaching Assistants, Midwestern State University. Mentored in laboratory instruction, grading, student communication, and exam preparation.
- **Yagna Pandit**, M.S. Student & Graduate Teaching Assistant, Midwestern State University (2025–Present). Mentored in research planning, data analysis, and laboratory instruction.
- **Kim Ngan Phung**, M.S. Student & Graduate Teaching Assistant, Midwestern State University (2025–2026). Mentored in research design, methodology, data interpretation, and teaching.
- **Chloe Hoang**, Pre-Med Research Intern, University of Texas at Arlington (2023–2024). Mentored in cardiac MRI analysis for heart failure research.
- **Gabriel G. Hillebrand**, Medical Student Research Intern, University of Texas at Arlington (2023). Mentored in cardiac MRI analysis, manuscript preparation, and scientific poster development.
- **Manisha Shrestha**, Undergraduate Research Intern, University of Texas at Arlington (2022). Mentored in cardiac MRI analysis, resulting in a published conference abstract and presentation.

Media Coverage

- 1) University of Texas at Arlington Health Bulletin, 2023.
- 2) University of Texas at Arlington Innovations in Health Research Magazine, 2022.
- 3) University of Texas at Arlington Health Magazine, 2020.
- 4) University of Texas at Arlington Inquiry Magazine, 2019.