

Scott L. Davis, PhD

Curriculum Vitae

Address:

Integrative Physiology Laboratory Applied Physiology & Sport Management Southern Methodist University P.O. Box 750382

Dallas, TX 75275-0382 Phone: 214-768-1028 Email: sldavis@smu.edu

EDUCATION

Post-Doctoral:

2003-2006 Post-doctoral Research Fellowship - Integrative Physiology

Department of Internal Medicine, Division of Cardiology

University of Texas Southwestern Medical Center, Dallas, TX; and

Institute for Exercise & Environmental Medicine, Texas Health Presbyterian

Hospital Dallas, Dallas, TX Mentor: Craig G. Crandall, PhD

Graduate:

2003 Doctor of Philosophy – Exercise & Sport Science

University of Utah, Salt Lake City, UT 84112

Emphasis: Exercise Physiology

Minors: Molecular Biology and Human Metabolism

Mentors: Andrea T. White, PhD and Jack H. Petajan, MD, PhD

2002 Master of Science – Kinesiology & Health Education

University of Wyoming, Laramie, WY 82071

Emphasis: Exercise Physiology Mentor: John G. Wilkinson, PhD

Undergraduate:

1993 Bachelor of Science – Physical & Health Education

University of Wyoming, Laramie, WY 82071

Emphasis: Exercise Physiology

PROFESSIONAL EXPERIENCE & TRAINING

Academic Appointments:

2015-current **Associate Professor with Tenure**

Department of Applied Physiology & Sport Management Simmons School of Education & Human Development

Southern Methodist University, Dallas, TX

2021-current **Volunteer Associate Professor**

Department of Applied Clinical Research

School of Health Professions

University of Texas Southwestern Medical Center, Dallas, TX

2014-current *Director*

Integrative Physiology Laboratory

Department of Applied Physiology & Sport Management Simmons School of Education & Human Development

Southern Methodist University, Dallas, TX

2010-current **Director**

Applied Physiology Laboratory

Department of Applied Physiology & Sport Management Simmons School of Education & Human Development

Southern Methodist University, Dallas, TX

2013-2021 *Director*

Multiple Sclerosis Neurophysiology Research

Multiple Sclerosis Program

Department of Neurology & Neurotherapeutics

University of Texas Southwestern Medical Center, Dallas, TX

2010-2021 Adjunct Associate Professor

Deborah Viragh Research Laboratory for Multiple Sclerosis Pathophysiology

Multiple Sclerosis Program

Department of Neurology & Neurotherapeutics

University of Texas Southwestern Medical Center, Dallas, TX

2010-2015 **Assistant Professor**

Department of Applied Physiology & Wellness

Simmons School of Education & Human Development

Southern Methodist University, Dallas, TX

2006-2010 Assistant Professor

Multiple Sclerosis Program Department of Neurology

University of Texas Southwestern Medical Center, Dallas, TX

Administrative Appointments:

2012-current **Director**

Applied Physiology & Health Management Major

Department of Applied Physiology & Sport Management Simmons School of Education & Human Development

Southern Methodist University, Dallas, TX

Oversee all administrative and curricular decisions of the major as well as represent the department and school in university-wide decision-making in

education and research development.

2011-current *Director*

Advancing Physical Therapy Program Southern Methodist University, Dallas, TX

Lead collaborative partnership between Southern Methodist University and the University of Texas Southwestern Medical Center to provide a direct path for undergraduates at Southern Methodist University to the Doctor of Physical Therapy program at the University of Texas Southwestern Medical Center.

2022-2024 **Department Chair, ad interim**

Department of Applied Physiology & Sport Management Simmons School of Education & Human Development

Southern Methodist University, Dallas, TX

Primary academic and administrative leader for the Department, reporting directly to the Dean of the School. Role entailed overseeing the departmental strategic direction, fostering innovation in academic programs, collaborating with faculty on curriculum enhancements, managing budgets, mentorship of junior faculty and doctoral students and addressing personnel matters.

Training:

2003-2006 Post-doctoral Research Fellow

Department of Internal Medicine, Division of Cardiology

University of Texas Southwestern Medical Center, Dallas, TX; and

Institute for Exercise & Environmental Medicine, Texas Health Presbyterian

Hospital Dallas, Dallas, TX Mentor: Craig G. Crandall, PhD

2000-2003 Pre-doctoral Research Fellow

Department of Exercise and Sport Science, College of Health

University of Utah, Salt Lake City, UT

Mentors: Andrea T. White, PhD and Jack H. Petajan, MD, PhD

1998-2000 Graduate Research Assistant

Department of Exercise and Sport Science, College of Health

University of Utah, Salt Lake City, UT

National Multiple Sclerosis Society grant (RG 2922B1/1): Effect of cooling on

physical performance and fatigue in multiple sclerosis patients. Mentors: Andrea T. White, PhD and Jack H. Petajan, MD, PhD 1996-1997 Graduate Teaching Assistant

Department of Exercise and Sport Science, College of Health

University of Utah, Salt Lake City, UT Mentor: Maurie J. Luetkemeier, PhD

1995-1996 Human Anatomy Laboratory Coordinator

College of Health Sciences

University of Wyoming, Laramie, WY

1994-1996 Graduate Research & Teaching Assistant

Human Energy Research Laboratory

Department of Physical and Health Education

University of Wyoming, Laramie, WY

Mentors: John G. Wilkinson, PhD & Ward K. Gates, PhD

1993 Exercise Physiology Intern

Saint Mary's Heart Institute and Regional Medical Center, Reno. NV

Mentor: William Land, MS and Renee MacDougal, RN, BS

HONORS AND AWARDS:

2022 Excellence in Mentoring Award, Office of Engaged Learning, Southern

Methodist University, Honors faculty members who have provided on

Methodist University. Honors faculty members who have provided our

Engaged Learning Fellows exceptional mentoring.

2020 American Physiological Society (APS) Publications – 8th most shared article in

2020 across all APS publications (16 journals).

https://twitter.com/APSPublications/status/1346185197549707269

2019 Editor's Pick March – American College of Sports Medicine (ACSM) Journals.

Distinction in scholarship in *Medicine and Science in Sports & Exercise*

(MSSE) for the article entitled "Impaired thermoregulatory function during dynamic exercise in multiple sclerosis". Editor's Picks are a collection of the very best original research papers published ACSM research journals. Each month, the most outstanding recently published papers are selected

by MSSE's Editor-in-Chief and recommended for reading.

2017 APSselect – May

Distinction in scholarship in the Journal of Neurophysiology for the article entitled "Impaired sweating responses to a passive whole-body heat stress in individuals with multiple sclerosis". APSselect is a collection of the very best original research papers published by the American Physiological Society (APS). Each month, the most outstanding recently published papers from the ten research journals of the APS are selected and made available through a multi-journal website. The article was also selected for a

podcast for the *Journal of Neurophysiology*.

https://www.podbean.com/media/share/pb-unmwv-6ba956?download=1

| 2017 | President's Associates Outstanding Faculty Award, Southern Methodist University. Given annually to a tenured faculty member for the advancement of teaching and learning. This award is designed to honor faculty who have sustained high achievement as teachers and whose scholarship makes a meaningful contribution to student learning. |
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| 2014-2015 | International Research Collaboration Award, The University of Sydney, Australia; Competitively reviewed award given to international researchers of high standing to share and disseminate new and original ideas and/or techniques, initiate and undertake collaborative research, and facilitate interaction and training of staff and students. |
| 2014 | Nominated for Golden Mustang Outstanding Faculty Award, Southern Methodist University. |
| 2014 | Finalist, Student's Association Faculty Award, SMU Student Senate, Southern Methodist University. |
| 2014 | Honoring Our Professors' Excellence (HOPE) Award; One of 42 University educators honored by Department of Residence Life and Student Housing, Southern Methodist University. |
| 2013 | Honoring Our Professors' Excellence (HOPE) Award; One of 46 University educators honored by Department of Residence Life and Student Housing, Southern Methodist University. |
| 2009-2011 | NIH Loan Repayment Program Award; Competitively reviewed award for clinically relevant research, University of Texas Southwestern Medical Center. |
| 2009 | Recognition Award for Meritorious Research by a Young Investigator, American Physiological Society-Neural Control & Autonomic Regulation Section. |
| 2005-2007 | NIH Loan Repayment Program Award, Competitively reviewed award for clinically relevant research, University of Texas Southwestern Medical Center. |
| 2004-2006 | NIH-Individual National Research Service Award, University of Texas Southwestern Medical Center. |
| 2002 | Outstanding Doctoral Student Award, Exercise & Sport Science, University of Utah. |
| 2001 | Student Award Competition Finalist, Southwest American College of Sports Medicine. |
| 2001 | Outstanding Doctoral Student Award, Exercise & Sport Science, University of Utah. |
| 2000-2003 | University of Utah Graduate Research Fellowship, University of Utah. |
| 1999 | N. P. Neilson Scholarship Award, University of Utah. |
| 1995 | Ellbogen Outstanding Teaching Assistant Award nominee, University of Wyoming. |
| 1994 | Vern Gale Scholarship Award, University of Wyoming. |
| 1991-1992 | Deans Honor Roll, University of Wyoming. |
| 1987-1991 | Wyoming Honor Scholarship Award, University of Wyoming. |

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RESEARCH GRANTS & FUNDING

Current Extramural Funding:

2024-2027 Bingocize® NTX: An evidence-based health promotion program to improve the

quality of life of North Texas certified nursing facility residents Texas

Texas Health and Human Services Principal Investigator: SL Davis

Funding: \$533,574

Completed Extramural Funding:

2017-2020 Novel approaches to mitigating heat-related fatigue in individuals with multiple

sclerosis

MS Research Australia Principal Investigator: O Jay Funding: \$176,000 (AUS) Co-Investigator: SL Davis

Clinical outcomes and autonomic mechanisms associated with cardiovascular 2013-2017

regulation in MS

National Multiple Sclerosis Society (RG4696A3/2)

Principal Investigator: SL Davis

Funding: \$235,973

2014-2015 Novel assessment of body temperature regulation in MS patients performing

> physical activity in the heat. MS Research Australia Principal Investigator: O Jay Funding: \$21,000 (AUS) Co-Investigator: SL Davis

2014-2015 Temperature regulation during exercise in MS.

International Research Collaboration Award, The University of Sydney,

Australia

Principal Investigator: SL Davis

Funding: \$15,000 (AUS)

2014-2015 Heat exposure and posture stability in MS patients

> National Multiple Sclerosis Society Principal Investigator: CG Crandall

Funding: \$44,000

Co-Investigator: SL Davis

2013-2015 Dynamic blood pressure control and orthostatic tolerance in individuals with MS

at rest and during heat stress

NIH Heart Lung and Blood Institute (1 R15 HL117224-01)

Principal Investigator: SL Davis

Funding: \$378,962

2012-2013 Is thermoregulatory function impaired in MS patients during exercise in the heat? Kuzell Institute for Arthritis and Infectious Diseases (G001218) Principal Investigator: SL Davis Funding: \$30,000 2009-2013 Control of skin blood flow and sweating in grafted skin NIH National Institute of General Medical Sciences (R01GM068865) Principal Investigator: CG Crandall Funding: \$1,329,684 Co-Investigator: SL Davis 2008-2012 Neural control of skin blood flow and sweating in MS National Multiple Sclerosis Society (RG4043A1/1) Principal Investigator: SL Davis Funding: \$248,158 2009-2012 A validation study of diffusion tensor imaging as a physiologically relevant biomarker of brain tissue integrity in multiple sclerosis National Multiple Sclerosis Society (RG4091A3/1) Principal Investigator: RJ Fox Funding: \$708,835 Co-Investigator: SL Davis 2009-2012 Modeling the pathophysiology of Uhthoff's phenomenon in multiple sclerosis National Multiple Sclerosis Society (RG3780A3/3) Principal Investigator: **SL Davis** & EM Frohman Funding: \$185,000 2008-2012 The effects of 4-AP on the pathophysiology of MS during thermal stress National Multiple Sclerosis Society (PP-1485) Co-Principal Investigators: SL Davis and EM Frohman Funding: \$44,000 2007-2010 Baroreflex modulation of sympathetic nerve activity in MS patients National Multiple Sclerosis Society (PP-1440) Principal Investigator: SL Davis Funding: \$44,000 2004-2007 Use of ocular function to quantify the effects of thermal stress on multiple sclerosis patients National Multiple Sclerosis Society (PP-1040) Co-Principal Investigators: SL Davis and CG Crandall Funding: \$44,000 2004-2006 Neural control of blood flow in grafted skin NIH, National Institute of General Medical Sciences (F32GM071092) Principal Investigator: SL Davis Funding: \$112,617 2002-2003 Pilocarpine-induced sweat response to 15 weeks of exercise training in individuals with multiple sclerosis National Multiple Sclerosis Society (PP-0887) Co-Principal Investigators: SL Davis and AT White Funding: \$44,000

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2001-2003 Antioxidant activity and oxidative damage following exercise training in

individuals with multiple sclerosis

National Multiple Sclerosis Society (PP-0822)

Co-Principal Investigators: SL Davis and JH Petajan

Funding: \$33,000

1998 The effects of a mixed-macronutrient antioxidant beverage on markers of

oxidative stress and exercise performance Nutraceutical International, Park City, UT

Co-Principal Investigators: SL Davis and EW Askew

Funding: \$24,900

Completed Intramural Funding:

2020 Implementation of Biopac Student Home Lab Kits for remote learning in the

Applied Physiology laboratory curriculum.

Just-In-Time Teaching and Technology Grant, Southern Methodist University,

Dallas, TX

Principal Investigator: SL Davis

Funding: \$500

2015 Interactive system allowing collaborative involvement and interaction of

students within the classroom.

Just-In-Time Teaching and Technology Grant, Southern Methodist University,

Dallas, TX

Principal Investigator: SL Davis

Funding: \$1,072

2012-2013 Using iPad interactive 3-dimensional dissection software to investigate and

identify human muscular structure and function

Provost Instructional Technology Grant, Southern Methodist University, Dallas,

TX

Principal Investigator: SL Davis

Funding: \$2,700

2012-2013 Improved orthostatic tolerance with head cooling during whole-body heating

University Research Council Grant, Southern Methodist University, Dallas, TX

Principal Investigator: SL Davis

Funding: \$10,000

2001 Research Instrumentation Grant, University of Utah, Salt Lake City, UT

Co-Principal Investigators: **SL Davis** and EW Askew

Funding: \$15,383

2000 Antioxidant activity and oxidative damage following exercise training in

individuals with multiple sclerosis

Graduate Research Fellowship, University of Utah, Salt Lake City, UT

Principal Investigator: SL Davis

Funding: \$10,000

1995 Effect of high-intensity interval cycling on markers of immune function

College of Health Sciences, University of Wyoming, Laramie, WY

Co-Principal Investigators: SL Davis and TE Wilson

Funding: \$2,000

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1995 Effects of "in season" training and subsequent taper on road cycling

performance

College of Health Sciences, University of Wyoming, Laramie, WY

Co-Principal Investigators: SL Davis and TE Wilson

Funding: \$3,500

Awarded Funding to Students:

2022-2023 Claire Trotter (PhD Student)

Alterations to cardiovascular control in females with multiple sclerosis

at rest and during stress

AHA Pre-doctoral Fellowship (915655)

American Heart Association

Award: \$32,036

Role: Faculty Supervisor

2022 Alex Smith (Undergraduate Student)

Altered thermal pain thresholds in individuals with multiple sclerosis

SMU Engaged Learning Fellowship (ELF)

SMU Office of Engaged Learning

Award: \$2,000

Role: Faculty Supervisor

2020 Claire Trotter (PhD Student)

Alterations to muscle sympathetic nerve activity in multiple sclerosis

Doctoral Student Research Grant

American College of Sports Medicine Foundation

Award: \$4,960

Role: Faculty Supervisor

2020-2021 Claire Trotter (PhD Student)

Impact of a mindfulness-based training program on the stress response to

acute sympatho-excitatory stimuli Student Research Development Award

Texas Chapter-American College of Sports Medicine

Award: \$2,000

Role: Faculty Supervisor

2015-2016 Mu Huang (PhD Student)

Thermoregulatory dysfunction in multiple sclerosis patients during moderate

exercise in a thermoneutral environment Student Research Development Award

Texas Chapter-American College of Sports Medicine

Award: \$1,000

Role: Faculty Supervisor

PUBLICATIONS

Manuscripts Published in Peer Reviewed Journals:

*indicates graduate student; †indicates undergraduate student

- Wakeham DJ, Hissen SL, MacNamara JP, Davis SL, Fadel PJ, Benjamin D. Levine BD, & Hearon Jr CM. Functional sympatholysis of Neuropeptide Y-mediated vasoconstriction in humans. *Journal of Physiology*, 2025 May 31. Online ahead of print. PMID: 40448698.
- Chaseling G, Blackett K, Vucic S, Barnett M, Davis SL, Jay O, Vargas NT. The effect of coldwater mouth swilling on thermal perceptions and heat-related symptoms for people with multiple sclerosis exercising in a hot environment. *European Journal of Applied Physiology*, 2025 Apr 5. Online ahead of print. PMID: 40186657.
- Kissell CE^{*}, Young BE, Jarrard CP^{*}, Huang M, Allen DR, Okuda DT, Smith SA, Fadel PJ, Davis SL. Reduced resting beat-to-beat blood pressure variability in females with relapsing-remitting multiple sclerosis. *Multiple Sclerosis and Related Disorders* 83:105416, 2024. PMID: 38244526.
- Vargas NT, Chapman CL, Reed EL, Lizarraga A, Fisher NM, Davis SL, Schlader ZJ.
 Voluntary cooling during exercise is augmented in people with multiple sclerosis who experience heat sensitivity. *Medicine and Science in Sports and Exercise* 53: 2405-2418, 2021.
- Chaseling GK*, Filingeri D, Allen DR*, Barnett M, Vucic S, **Davis SL**, and Jay O. Blunted sweating does not alter the rise in core temperature in people with multiple sclerosis exercising in the heat. *American Journal of Physiology Regulatory, Integrative and Comparative Physiology*. 320: R258-R267, 2021.
- Luetkemeier MJ, Allen DR^{*}, Huang M^{*}, Pizzey FK[†], Parupia IM[†], Wilson TE, and **Davis SL**.
 Skin tattooing impairs sweating during passive whole-body heating. *Journal of Applied Physiology* 129: 1033-1038, 2020.
- Filingeri D, Chaseling G*, Christogianni A*, Feka K, Bianco A, **Davis SL**, and Jay O. Individualized analysis of skin thermosensory thresholds and sensitivity in heat-sensitive people with multiple sclerosis. *Temperature* 8: 21-29, 2020.
- Allen DR*, Huang M*, Morris NB*, Chaseling GK*, Frohman EM, Jay O, and Davis SL.
 Impaired thermoregulatory function during dynamic exercise in multiple sclerosis. Medicine and Science in Sports and Exercise 51: 395-404, 2019.
- Chaseling GK*, Allen DR*, Vucic S, Barnett M, Frohman E, **Davis SL**, and Jay O. Core temperature is not elevated at rest in people with relapsing-remitting multiple sclerosis. *Multiple Sclerosis and Related Disorders* 29: 62-6, 2019.
- Huang M*, Frantz J*, Moralez G, Sabo T, Davis PF, Davis SL, Bell KR, and Purkayastha S. Reduced resting and increased elevation of heart rate variability with cognitive task performance in concussed athletes. *Journal of Head Trauma and Rehabilitation* 34: 45-51, 2019.
- **Davis SL**, Jay O, and Wilson TE. Thermoregulatory dysfunction in multiple sclerosis. *Handbook of Clinical Neurology* 157: 701-714, 2018.

- Christogianni A^{*}, Bibb R, Davis SL, Jay O, Barnett M, Evangelou N, and Filingeri D. Temperature sensitivity in multiple sclerosis: An overview of its impact on sensory and cognitive symptoms. *Temperature* 5: 208-223, 2018.
- Chaseling GK^{*}, Filingeri D, Barnett M, Hoang P, **Davis SL**, and Jay O. Cold-water ingestion improves exercise tolerance of heat-sensitive people with MS. *Medicine and Science in Sports and Exercise* 50: 643-648, 2018.
- Hubbard NA^{*}, Turner MP, Ouyang M, Himes L, Thomas BP, Hutchison JL, Faghihahmadabadi S, **Davis SL**, Strain JF, Spence J, Krawczyk DC, Huang H, Lu H, Hart J Jr, Frohman TC, Frohman EM, Okuda DT, and Rypma B. Calibrated imaging reveals altered grey matter metabolism related to white matter microstructure and symptom severity in multiple sclerosis. *Human Brain Mapping* 38: 5375-5390, 2017.
- Filingeri D, Chaseling G^{*}, Hoang P, Barnett M, **Davis SL**, and Jay O. Afferent thermosensory function in relapsing-remitting multiple sclerosis following exercise-induced increases in body temperature. *Experimental Physiology* 102: 887-893, 2017.
- Allen DR*, Huang M*, Parupia IM[†], Dubelko AR[†], Frohman EM, and **Davis SL**. Impaired sweating responses to a passive whole-body heat stress in individuals with multiple sclerosis. *Journal of Neurophysiology* 118: 7-14, 2017.
- Poh PYS, Adams AN, Huang M*, Allen DR*, **Davis SL**, Teng AS, and Crandall CG. Increased postural sway in persons with multiple sclerosis during short-term exposure to warm ambient temperatures. *Gait and Posture* 53: 230-235, 2017.
- Pearson J, Ganio MS, Schlader ZJ, Lucas RAI, Gagnon D, Rivas E, Davis SL, Kowalske KJ, and Crandall CG. Post-junctional sudomotor and cutaneous vascular responses in non-injured skin following heat acclimation in burn survivors. *Journal of Burn Care and Research* 38: e284-e292, 2017.
- Hubbard NA^{*}, Turner M, Hutchison JL, Ouyang A, Strain J, Oasay L, Sundaram S, **Davis SL**, Remington GM, Brigante R, Huang H, Hart J Jr, Frohman TC, Frohman EM, Biswal BB, and Rypma B. Multiple sclerosis-related white matter microstructural change alters the BOLD hemodynamic response. *Journal of Cerebral Blood Flow and Metabolism* 36: 1872-84, 2016.
- Huang M*, Allen DR*, Keller DM, Fadel PJ, Frohman EM, and **Davis SL**. Impaired carotid baroreflex control of arterial blood pressure in multiple sclerosis. *Journal of Neurophysiology* 116: 81-7, 2016.
- Sandroff BM, Motl RW, and Davis SL. Effects of vigorous walking exercise on core body temperature and inhibitory control in thermosensitive persons with multiple sclerosis. Neurodegenerative Disease Management 6: 13-21, 2016.
- Hubbard NA*, Hutchison JL, Turner MP, Sundaram S, Oasay L, Robinson D, Strain J, Weaver T, Davis SL, Remington GM, Huang H, Biswal BB, Hart J, Frohman TC, Frohman EM, and Rypma B. Asynchrony in executive networks predicts cognitive slowing in multiple sclerosis. *Neuropsychology* 30: 75-86, 2016.
- Frohman AN, Okuda DT, Beh S, Treadaway K, Mooi C, **Davis SL**, Shah A, Frohman TC, and Frohman EM. Aquatic training in MS: neurotherapeutic impact upon quality of life. *Annals of Clinical and Translational Neurology* 2: 864-72, 2015.
- Huang M*, Jay O, and Davis SL. Autonomic dysfunction in multiple sclerosis: implications for exercise. Autonomic Neuroscience 188: 82-85, 2015.

- Keller DM, Fadel PJ, Harnsberger MA, Remington GM, Frohman EM, and Davis SL.
 Reduced spontaneous sympathetic nerve activity in multiple sclerosis patients. *Journal of Neurological Sciences* 344: 210-4, 2014.
- Muppidi S, Adams-Huet B, Tajzoy E, Scribner M, Blazek P, Spaeth EB, Frohman EM, Davis SL, and Vernino S. Dynamic pupillometry as an autonomic testing tool. *Clinical Autonomic Research* 23: 297-303, 2013.
- Frohman TC, Davis SL, Beh S, Greenberg BM, Remington G, and Frohman EM. Uhthoff's phenomena in MS--clinical features and pathophysiology. *Nature Reviews Neurology* 9: 535-40, 2013.
- White AT, Vener JM, Van Haitsma T, and Davis SL. Effect of passive whole-body heating on central conduction and cortical excitability in multiple sclerosis patients and healthy controls. *Journal of Applied Physiology* 114: 1697-704, 2013.
- Blazek P, Davis SL, Greenberg BM, Conger A, Conger D, Vernino S, Beh S, Stuve O, Saidha S, Ratchford JN, Green A, Calabresi PA, Balcer LJ, Frohman TC, and Frohman EM. Objective characterization of the relative afferent pupillary defect in MS. *Journal of Neurological Sciences* 323: 193-200, 2012.
- Wenner MM, Wilson TE, **Davis SL**, and Stachenfeld NS. Pharmacological curve fitting to analyze cutaneous adrenergic responses. *Journal of Applied Physiology* 111: 1703-9, 2011.
- Frohman TC, **Davis SL**, Frohman EM. Modeling the mechanisms of Uhthoff's phenomenon in MS patients with internuclear ophthalmoparesis. *Annals of the New York Academy of Sciences* 1233: 313-9, 2011.
- Sakaie K, Takahashi M, Dimitrov I, Togao O, Davis SL, Remington GM, Conger A, Conger D, Frohman TC, Fox R, and Frohman EM. Diffusion tensor imaging the medial longitudinal fasciculus in INO: opportunities and challenges. *Annals of the New York Academy of Sciences* 1233: 307-12, 2011.
- Cui J, Shibasaki M, Low DA, Keller DM, Davis SL, and Crandall CG. Muscle sympathetic responses during orthostasis in heat-stressed individuals. *Clinical Autonomic Research* 21: 381-7, 2011.
- Frohman TC, Castro W, Shah A, Courtney A, Ortstadt J, Davis SL, Logan D, Abraham T, Abraham J, Remington G, Treadaway K, Graves D, Hart J, Stuve O, Lemack G, Greenberg B, and Frohman EM. Symptomatic therapy in multiple sclerosis. *Therapeutic Advances in* Neurological Disorders 4: 83-98, 2011.
- Courtney AM, Castro-Borrero W, **Davis SL**, Frohman TC, and Frohman EM. Functional treatments in multiple sclerosis. *Current Opinion in Neurology* 24: 250-4, 2011.
- Keller DM, Low DA, Davis SL, Hastings J, and Crandall CG. Skin surface cooling improves orthostatic tolerance following prolonged head-down bed rest. *Journal of Applied Physiology* 110: 1592-7, 2011.
- Cui J, Shibasaki M, Low DA, Keller DM, Davis SL, and Crandall CG. Heat stress attenuates the increase in arterial blood pressure during the cold pressor test. *Journal of Applied Physiology* 109: 1354-9, 2010.
- **Davis SL**, Wilson TE, White AT, and Frohman EM. Thermoregulation in multiple sclerosis. *Journal of Applied Physiology* 109: 1531-7, 2010.
- Crandall CG and **Davis SL**. Cutaneous vascular and sudomotor responses in human skin grafts. *Journal of Applied Physiology* 109: 1524-30, 2010.

- **Davis SL** and Crandall CG. Heat stress alters hemodynamic responses during the Valsalva maneuver. *Journal of Applied Physiology* 108: 1591-4, 2010.
- Miles B, **Davis SL**, Crandall CG, and Ellis E. Laser-Doppler examination of the blood supply in pericranial flaps. *Journal of Oral and Maxillofacial Surgery* 68: 1740-5, 2010.
- Shibasaki M, **Davis SL**, Cui J, Low DA, Keller DM, and Crandall CG. Botulinum toxin abolishes sweating via impaired sweat gland responsiveness to exogenous acetylcholine. *British Journal of Dermatology* 161: 757-61, 2009.
- **Davis SL**, Shibasaki M, Low DA, Cui J, Keller DM, Wingo JE, Purdue GF, Hunt JL, Arnoldo BD, Kowalske KJ, and Crandall CG. Sustained impairments in cutaneous vasodilation and sweating in grafted skin following long term recovery. *Journal of Burn Care and Research* 30: 675-685, 2009.
- Low DA, Wingo JE, Keller DM, Davis SL, Cui J, Zhang R, and Crandall CG. Dynamic cerebral autoregulation during passive heat stress in humans. American Journal of Physiology Regulatory Integrative and Comparative Physiology 296: R1598-605, 2009.
- Cui J, Shibasaki M, Davis SL, Low DA, Keller DM, and Crandall CG. Whole body heat stress attenuates baroreflex control of muscle sympathetic nerve activity during postexercise muscle ischemia. *Journal of Applied Physiology* 106: 1125-31, 2009.
- Keller DM, Low DA, Wingo JE, Brothers RM, Hastings JL, **Davis SL**, and Crandall CG. Acute volume expansion preserves orthostatic tolerance during whole-body heat stress in humans. *Journal of Physiology (London)* 587: 1131-9, 2009.
- Shibasaki M, Low DA, Davis SL, and Crandall CG. Nitric oxide inhibits cutaneous vasoconstriction to exogenous norepinephrine. *Journal of Applied Physiology* 105: 1504-1508, 2008.
- Mills DA, Frohman TC, Davis SL, Salter AR, McClure S, Beaty I, Shah A, Galetta S, Eggenberger E, Zee DS, and Frohman EF. Break in binocular fusion during head turning in MS patients with INO. *Neurology* 78: 458-461, 2008.
- Wingo JE, Low DA, Keller DM, **Davis SL**, Purdue GF, Hunt JL, Kowalske KJ, and Crandall CG. Heat acclimation of an adult female with a large surface area of grafted skin. *Journal of Burn Care and Research* 29: 848-851, 2008.
- Low DA, Wingo JE, Keller DM, Davis SL, Zhang R, and Crandall CG. Cerebrovascular responsiveness to steady-state changes in end-tidal CO2 during passive heat stress. *Journal* of Applied Physiology 104: 976-81, 2008.
- Low DA, Davis SL, Keller DM, Shibasaki M, and Crandall CG. Cutaneous and hemodynamic responses during hot flashes in symptomatic postmenopausal women. *Menopause* 15: 290-95, 2008.
- Davis SL, Frohman TC, Crandall CG, Brown MJ, Mills DA, Kramer PD, Stüve O, and Frohman EM. Modeling Uhthoff's phenomenon in MS patients with internuclear ophthalmoparesis (INO). *Neurology* 70: 1098-1106, 2008.
- Davis SL, Shibasaki M, Low DA, Cui J, Keller DM, Purdue GF, Hunt JL, Arnoldo BD, Kowalske KJ, and Crandall CG. Cutaneous vasoconstriction during whole-body and local cooling in grafted skin 5-9 months post-surgery. *Journal of Burn Care and Research* 29: 36-41, 2008.

- Shibasaki M, Durand S, Davis SL, Cui J, Low DA, Keller DM, and Crandall CG. Endogenous nitric oxide attenuates neurally mediated cutaneous vasoconstriction. *Journal of Physiology* (London) 585: 627-34, 2007.
- Low DA, Vu A, Brown M, **Davis SL**, Keller DM, Levine BD, and Crandall CG. Temporal thermometry fails to track body core temperature during heat stress. *Medicine and Science in Sports and Exercise* 39: 1029-35, 2007.
- Davis SL, Shibasaki M, Low DA, Cui J, Keller DM, Purdue GF, Hunt JL, Arnoldo BD, Kowalske KJ, and Crandall CG. Crandall. Skin grafting impairs post-synaptic cutaneous vasodilator and sweating responses. *Journal of Burn Care and Research* 28: 435-41, 2007.
- **Davis SL**, Shibasaki M, Low DA, Cui J, Keller DM, Purdue GF, Hunt JL, Arnoldo BD, Kowalske KJ, and Crandall CG. Impaired cutaneous vasodilation and sweating in grafted skin during whole-body heating. *Journal of Burn Care and Research* 28: 427-34, 2007.
- Kimura K, Low DA, Keller DM, Davis SL, and Crandall CG. Cutaneous blood flow and sweat rate responses to exogenous administration of acetylcholine and methacholine. *Journal of Applied Physiology* 102: 1856–61, 2007.
- Low DA, Shibasaki M, Davis SL, Keller DM, and Crandall CG. Does local heating induced nitric oxide production attenuate vasoconstrictor responsiveness in human skin? *Journal of Applied Physiology* 102: 1839-43, 2007.
- Keller DM, Davis SL, Low DA, Shibasaki M, Raven PB, and Crandall CG. Carotid baroreceptor stimulation alters cutaneous vascular conductance during whole-body heating. Journal of Physiology (London) 577: 925-33, 2006.
- Shibasaki M, **Davis SL**, Cui J, Low DA, Keller DM, Durand S, and Crandall CG. Neurally mediated vasoconstriction is capable of decreasing skin blood flow during orthostasis in the heat stressed human. *Journal of Physiology (London)* 575: 953-59, 2006.
- Keller DM, Cui J, **Davis SL**, Low DA, and Crandall CG. Heat stress enhances arterial baroreflex control of muscle sympathetic nerve activity via increased sensitivity of burst gating, not burst area, in humans. *Journal of Physiology (London)* 573: 445-51, 2006.
- Cui J, Sathishkumar M, Wilson TE, Shibasaki M, **Davis SL**, and Crandall CG. Spectral characteristics of skin sympathetic nerve activity in heat stressed humans. *American Journal of Physiology Heart and Circulatory Physiology* 290: H1601-9, 2006.
- Davis SL, Fadel PJ, Cui J, Thomas GD, and Crandall CG. Skin blood flow influences near infrared spectroscopy derived measurements of tissue oxygenation during heat stress. *Journal of Applied Physiology* 100: 221-4, 2006.
- Davis SL, Wilson TE, Vener JM, Crandall CG, Petajan JH, and White AT. Pilocarpine-induced sweat gland function in individuals with multiple sclerosis. *Journal of Applied Physiology* 98: 1740-4, 2005.
- Durand S, Davis SL, Cui J, and Crandall CG. Exogenous nitric oxide inhibits sympathetically mediated vasoconstriction in human skin. *Journal of Physiology (London)* 562: 629-34, 2005.
- Crandall CG, Meyer DM, Davis SL, and Dellaria SM. Palmar skin blood flow and temperature responses throughout endoscopic sympathectomy. *Anesthesia and Analgesia* 100: 277-83, 2005.
- White AT, Davis SL, and Wilson TE. Metabolic, thermoregulatory, and perceptual responses during exercise after lower vs. whole body precooling. *Journal of Applied Physiology* 94: 1039-44, 2003.

- Subudhi AW, Davis SL, Askew EW, Walker JA, and Johnson SC. Time course of urinary oxidative stress markers following sub-maximal and maximal exercise. *Journal of Human Movement Studies* 43: 35-47, 2002.
- Wilson TE, Johnson SC, Petajan JH, Davis SL, Gappmaier E, Luetkemeier MJ, and White AT. Thermal regulatory responses to submaximal cycling following lower-body cooling in humans. European Journal of Applied Physiology and Occupational Physiology 88: 67-75, 2002.
- Subudhi AW, Davis SL, Kipp RW, and Askew EW. Antioxidant status and oxidative stress in elite alpine ski racers. *International Journal of Sport Nutrition and Exercise Metabolism* 11: 32-41, 2001.
- White AT, Wilson TE, Davis SL, and Petajan JH. Effect of precooling on physical performance in multiple sclerosis. *Multiple Sclerosis* 6: 176-180, 2000.

Book Chapters:

- **Davis SL,** Jay O, and Wilson TE. Thermoregulatory dysfunction in multiple sclerosis. In: *Thermoregulation: from basic sciences to clinical neurology,* edited by Romanovsky A. Elsevier, 2018.
- Shibasaki M and Davis SL. Human perspiration and cutaneous circulation. In: Fluid Balance, Hydration and Athletic Performance, edited by Meyer F, Szygula Z, and Wilk B. CRC Press, 2015, p 33-58.
- Davis SL and Frohman EM. Heat sensitivity: Uhthoff's phenomenon. In: Multiple Sclerosis for the Physician Assistant, edited by Frohman TC, O'Donoghue DL, and Northrup D. New York: National Multiple Sclerosis Society, 2011, p 98-101.
- Shah A, Davis SL, Bates A, Lemack G, Frohman TC, and Frohman EM. Symptomatic therapy in multiple sclerosis. In: Multiple Sclerosis 3 - Blue Books of Neurology Series, edited by Lucchinetti CF and Hohlfeld R. Philadelphia: Saunders Elsevier, 2010, p 316-354.

PRESENTATIONS

International Invited Oral Presentations:

- Invited Speaker, Faculty of Health Sciences, University of Sydney, Sydney, Australia. Thermoregulatory control of skin blood flow and sweating in multiple sclerosis. June 2015.
- Invited Speaker, Neuroscience Research Australia, Sydney, Australia. *Thermoregulatory control of skin blood flow and sweating in multiple sclerosis*. June 2015.

National, Local, & University Invited Oral Presentations/Seminars

- Invited Speaker, Past-President's Lecture, 2023 Texas American College of Sports Medicine Annual Meeting, Waco, TX. *Autonomic dysfunction in multiple sclerosis: Implications on thermoregulatory function.* February 2023.
- Invited Speaker, 2021 Fort Benning Heat Forum, Unites States Army, Fort Benning Heat Center, Fort Benning, GA. Skin tattooing impairs sweating during passive whole-body heating. February 2021.

- Invited Speaker, Natural Science Seminar, Department of Integrative Physiology and Health Science, Alma College, Alma, MI. Autonomic dysfunction in multiple sclerosis: Baroreflex control of heart rate & blood pressure. October 2018.
- Invited Speaker, College of Applied Health Sciences, University of Illinois at Chicago, Chicago, IL. Autonomic dysfunction in multiple sclerosis: Implication for thermoregulatory function. November 2017.
- Invited Speaker, Department of Exercise & Nutrition Sciences, School of Public Health and Health Professions, University of Buffalo, Buffalo, NY. Autonomic impairments in blood pressure control in multiple sclerosis. October 2015.
- Invited Speaker, The Sylvie 2014 Celebration Awards and 2015 Bike MS Kick Off, National Multiple Sclerosis Society, Dallas, TX. Rehabilitation research update: Impact of support on research in North Texas. September 2014.
- Invited Speaker, Symposium: Aging and Pathophysiology in Skin Blood Flow Control: Implications for Exercise Thermoregulation, American College of Sports Medicine annual meeting, Indianapolis, IN. *Thermoregulatory control of skin blood flow and sweating in multiple sclerosis during exercise*. June 2013.
- Invited Speaker, Featured Topic Symposium: Microvascular Responses and Thermoregulatory Control in Normal and Clinical Populations (sponsored by American Physiological Society Environmental and Exercise Physiology Section), Experimental Biology 2013 annual meeting, Boston, MA. Thermoregulatory control of skin blood flow and sweating in multiple sclerosis. April 2013.
- Invited Speaker, Texas American College of Sports Medicine Lecture, Department of Kinesiology, University of Texas at Arlington, Arlington, TX. Thermoregulatory dysfunction in multiple sclerosis: A "heated" discussion. March 2013.
- Invited Speaker, Capra Research Symposium-Multiple Sclerosis: Diagnosis, Treatment & Management, School of Health Professions, University of Texas Southwestern Medical Center, Dallas, TX. Understanding autonomic dysfunction in multiple sclerosis. March 2013.
- Invited Speaker, National Multiple Sclerosis Society Physician Training Program, University of Texas Southwestern Medical Center, Dallas, TX. Impaired thermoregulation in multiple sclerosis. 2010-current.
- Invited Speaker, National Multiple Sclerosis Society Nurse Training Program, University of Texas Southwestern Medical Center, Dallas, TX. Impaired thermoregulation in multiple sclerosis. 2010-current.
- Invited Speaker, Research on Exercise & Wellness Group Colloquium Series, Southern Methodist University. Autonomic dysfunction in multiple sclerosis: Impact on exercise & thermoregulation. January 2012.
- Invited Speaker, College of Science and Health Symposium Series, Utah Valley University, Orem, UT. Autonomic dysfunction in multiple sclerosis: A "heated" discussion. November 2009.
- Invited Speaker, Metroplex Scientific MS Research Symposium, National Multiple Sclerosis Society - Lone Star Chapter, Dallas, TX. What does MS do to nervous system function? May 2008.

- Invited Speaker, Research Symposium, National Multiple Sclerosis Society Utah State Chapter, Salt Lake City, UT. MS patient management, care, and rehabilitation - current research. March 2008.
- Invited Speaker, Graduate Seminar, University of Utah, Salt Lake City, UT. *Neural control of skin blood flow and sweating in grafted skin.* March 2008.
- Invited Speaker, Missouri State University, Springfield, MO. *Thermoregulatory dysfunction in multiple sclerosis*. February 2006.
- Invited Speaker, STARS Mini-Symposium, University of Texas Southwestern Medical Center, Dallas, TX. *Heat illness*. August 2004.

Conference Oral Research Presentations:

- Davis SL, Shibasaki M, Cui J, Low DA, Keller DM, Hunt JL, Purdue GF, Arnoldo BD, Kowalske KJ, and Crandall CG. (2007). Cutaneous vasoconstriction during whole-body and local cooling in grafted skin 5-9 months post-surgery. Slide presentation at American Burn Association annual meeting, San Diego, CA.
- Davis SL, Shibasaki M, Cui J, Low DA, Keller DM, Hunt JL, Purdue GF, Arnoldo BD, Kowalske KJ, and Crandall CG. (2006). *Impaired cutaneous vasodilation and sweating in grafted skin during heat stress 6-9 months post-surgery*. Slide presentation at American Burn Association annual meeting, Las Vegas, NV.
- Davis SL, Shibasaki M, Cui J, Chukwumah OB, Hunt JL, Purdue GF, Arnoldo BD, Kowalske KJ, and Crandall CG. (2005). *Impaired nitric oxide mediated cutaneous vasodilation in juvenile grafted skin*. Slide presentation at American Burn Association annual meeting, Chicago, IL.
- **Davis SL**, Vener JM, Wilson TE, and White AT. (2003). *Pilocarpine induced sweat response following training in individuals with multiple sclerosis*. Slide presentation at American College of Sports Medicine annual meeting, San Francisco, CA.
- **Davis SL**, Vener JM, Wilson TE, Schaffer RA, and White AT. (2002). *Pilocarpine induced sweat response in multiple sclerosis patients*. Slide presentation at American College of Sports Medicine annual meeting, Saint Louis, MO.
- **Davis SL**, Wilson TE, Schaffer RA, Dolan RL, and White AT. (2001). *Exercise and thermoregulatory responses to lower limb and whole-body precooling.* Slide presentation at American College of Sports Medicine annual meeting, Baltimore, MD.

STUDENT SUPERVISION & TEACHING

Student Research Training:

Graduate Thesis, Dissertation, Doctoral Qualifying Exam Committee Chair:

2018-2023 Claire E. Trotter

Dissertation Committee Chair

PhD, Department of Applied Physiology & Sport Management, Simmons School of Education & Human Development, Southern Methodist University

Dissertation title: Alterations to cardiovascular control in females with

relapsing-remitting multiple sclerosis at rest and during stress.

2014-2018 Dustin R. Allen

Dissertation Committee Chair

PhD, Department of Applied Physiology & Wellness, Simmons School of Education & Human Development, Southern Methodist University

Dissertation title: Thermoregulatory dysfunction in multiple sclerosis.

2013-2017 Mu Huang

Dissertation Committee Chair

PhD, Department of Applied Physiology & Wellness, Simmons School of

Education & Human Development, Southern Methodist University Dissertation title: *Impairments in autonomic control of cardiovascular*

function in multiple sclerosis.

Graduate Thesis, Dissertation, Doctoral Qualifying Exam Committee Member:

2019-2023 Emily McClelland

Dissertation Committee Member

PhD, Department of Applied Physiology & Sport Management, Simmons School of Education & Human Development, Southern Methodist University

2016-2018 Andrew Udofa

Dissertation Committee Member

PhD, Department of Applied Physiology & Wellness, Simmons School of

Education & Human Development, Southern Methodist University
Dissertation title: Investigating the mechanical determinants of running
ground reaction forces by adding weight, changing footwear, and

maximizing speed.

2016 KiYoung Kim

Dissertation Committee Member

PhD, Department of Kinesiology and Health Education, University of Texas

at Austin

Dissertation title: Mechanisms of cutaneous microvascular endothelial

dysfunction in young black Americans.

2015-2016 Nicholas Hubbard

Dissertation Committee Member

PhD, Cognition and Neuroscience, School of Behavioral and Brain

Sciences, University of Texas at Dallas

Dissertation title: Physiological mechanisms of visual cortex blood-oxygen-

level dependent signal changes in multiple sclerosis.

2013-2016 Margaret Sala

Thesis Committee Member

PhD, Department of Psychology, Dedman College of Humanities &

Sciences, Southern Methodist University

Thesis title: Post-exercise affective response: Examining differences

between regular and infrequent exercisers.

2013-2016 Meara Wietzman

Dissertation Committee Member

PhD, Department of Psychology, Dedman College of Humanities &

Sciences, Southern Methodist University

Dissertation title: Perception and function of pain in non-suicidal self-injury:

A laboratory investigation.

2015 Chansol Hurr

Dissertation Committee Member

PhD, Department of Kinesiology and Health Education, University of Texas

at Austin

Dissertation title: Cerebral and peripheral microvascular function in

individuals with elevated cardiovascular disease risk.

2012-2014 Kenneth P. Clark

Dissertation Committee Member

PhD, Department of Applied Physiology & Wellness, Simmons School of

Education & Human Development, Southern Methodist University Dissertation title: *Ground force application during running determines*

function and dysfunction.

2012-2013 Noelle Bassi Smith

Dissertation Committee Member

PhD, Department of Psychology, Dedman College of Humanities &

Sciences, Southern Methodist University

Dissertation title: Physiological reactivity to pain in self-injurers: An in-depth

investigation.

Research Assistant/Associate Trainees:

2014 Jennifer O'Dalys Robb

> McNair Scholar Program, Undergraduate program with goal of increasing graduate degrees in underrepresented socio-economic and ethnic groups.

Southern Methodist University

Research Topic: Characteristics that lead to attrition in a faith-based weight loss program for African Americans.

(Resulted in abstract accepted for publication and poster presentation at the Society for Advancement of Hispanics/Chicanos and Native Americans in

Science National Conference, Los Angeles, 2014.)

Role: Faculty Research Mentor

2009-2010 Paul Blazek, Coppell High School, Coppell, TX

Research Mentor

STARS Program, Summer Research Program for High School Students

University of Texas Southwestern Medical Center

Research Topic: Objective characterization of the relative afferent pupillary

defect in MS. (Resulted in published manuscript in the Journal of

Neurological Sciences, 2012.) Role: Faculty Research Mentor

Undergraduate Internship (APSM 5610): Capstone experiential internship at an organization or entity for a total of 250 or more hours.

| 2018 | Wendy Birdsall, Integrative Physiology Laboratory, Southern Methodist University |
|------|---|
| 2016 | Ariana Dubelko, Integrative Physiology Laboratory, Southern Methodist University Iqra Parupia, Multiple Sclerosis Clinic, University of Texas Southwestern Medical Center |
| 2015 | Sarah Bailey, Integrative Physiology Laboratory, Southern Methodist University Caroline Bartelsmeyer, Multiple Sclerosis Clinic, University of Texas Southwestern Medical Center |
| 2014 | Paul Anderson, Applied Physiology Laboratory, Southern Methodist |

Paul Anderson, Applied Physiology Laboratory, Southern Methodist

University

Braeden Newton, Multiple Sclerosis Clinic, University of Texas

Southwestern Medical Center

2012 Jizalphons Pallathumadom, Multiple Sclerosis Clinic, University of Texas

Southwestern Medical Center

2011 Silje Fjortoft, Applied Physiology Laboratory, Southern Methodist University

Monika Korra, Applied Physiology Laboratory, Southern Methodist

University

<u>Undergraduate Research Practicum (APSM 4361/5361):</u> Students conducting supervised research in the Integrative Physiology Laboratory. Enrollment is by invitation only.

| 2023-2024 | Camryn Bradley Nate Monticure Zach Oldham |
|-----------|---|
| 2022-2023 | Kaitlyn Gearin Zach Oldham Raelyn Roberson |
| 2021-2022 | Alex Smith Kaitlyn Gearin Helena Knoll Raelyn Roberson |
| 2018-2019 | Anna Leigh Collier Sidney Lavigne Lexi Platz Noah Slusher |
| 2017-2018 | Ursa Bezan Kelly Lenz Lexi Platz |
| 2016-2017 | Christopher Anders Kelly Lenz Faith Pizzey Iqra Parupia Kaci Rood |
| 2015-2016 | Ursa Bezan Ariana Dubelko Iqra Parupia Claire Trotter |
| 2014-2015 | Paul Anderson Brooke Landrum Kaitlyn Maffuid Olivia Warner |
| 2013-2014 | Brooke Landrum Braeden Newton Steven Schiele Kenzie Scovill |
| 2012-2013 | Brooke Landrum Steven Schiele |

<u>Advancing Physical Therapy (APT) Students:</u> SMU students accepted to Doctor of Physical Therapy Program at the University of Texas Southwestern Medical Center

2025 Kate Janzen2022 Quinn Callier2021 Jessica Cooley

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| 2020 | Meredith Dalton |
|------|--|
| 2019 | Maddy Ferraro Austin Harris Susie Kim |
| 2018 | Mary Elise Waller |
| 2017 | Dalia El-Hag Emily Frisby Zachary Harward Rose Montonchaikul |
| 2016 | Laura Henderson Jasmine Richardson |
| 2015 | Kaitlyn Eastman Avis Jason Brooke Landrum Abigail Marchesseault Linh Nguyen Christopher Scott |
| 2014 | Kenzie Scovill Shradha Singh |
| 2012 | Christina Echevaria |

Trainee Awards and Recognition:

Claire E. Trotter (PhD Student)

2024 Michael J. Brody Young Investigator Award*

American Physiological Society-Neural Control & Autonomic Regulation Section

American Physiology Summit, Long Beach, CA

*Recognizes a promising young investigator who has made a significant research contribution to the understanding of neural control and autonomic regulation.

Award: \$1,000

2023 Research Recognition Award*

American Physiological Society-Neural Control & Autonomic Regulation Section

American Physiology Summit, Long Beach, CA

*Recognizes outstanding research by graduate students and postdoctoral fellows

who present a first author abstract at the American Physiology Summit.

Abstract Title: Blunted sympathetic transduction to blood pressure in females with

relapsing-remitting multiple sclerosis

Award: \$500

2023 Outstanding PhD Student Award

Simmons School of Education & Human Development

Southern Methodist University, Dallas, TX

2023 Dean's Departmental Award

SMU Research Day, Southern Methodist University, Dallas, TX

Abstract Title: Pressor and sympathetic responses to graded skeletal muscle metaboreflex activation in females with relapsing-remitting multiple sclerosis

Award: \$250

2023 Poster Award – 2nd Place-PhD Category

Texas Chapter-American College of Sports Medicine Annual Meeting, Waco, TX Abstract Title: *Pressor and sympathetic responses to graded skeletal muscle metaboreflex activation in females with relapsing-remitting multiple sclerosis*

Award: \$175

2022 Graduate Three Minute Thesis Competition— 1st Place*

Moody Graduate School, Southern Methodist University, Dallas, TX

Title: Alterations to cardiovascular control in females with multiple sclerosis

Award: \$800

*Represented SMU at the Conference of Southern Graduate School Three Minute

Thesis Regional Competition in Tampa, FL.

2022 Dean's Departmental Award

SMU Research Day, Southern Methodist University, Dallas, TX

Abstract Title: Spontaneous cardiovagal baroreflex sensitivity in females with

multiple sclerosis
Award: \$250

2019 Dean's Departmental Award

SMU Research Day, Southern Methodist University, Dallas, TX

Abstract Title: High intensity interval exercise reduces tolerance to a simulated hemorrhagic challenge relative to steady state exercise in heat stressed individuals

Award: \$250

Kaitlin Gearin (Undergraduate Student)

2023 Honorable Mention Award

SMU Research Day, Southern Methodist University, Dallas, TX

Abstract Title: Sympatho-excitatory stress in females with multiple sclerosis

Dustin R. Allen (PhD Student)

2018 Dean's Departmental Award

SMU Research Day, Southern Methodist University, Dallas, TX

Abstract Title: Carotid baroreflex responses to simulated hypotension are blunted

during passive whole-body heat stress in young women

Award: \$250

2017 Manuscript Award

Texas Chapter-American College of Sports Medicine Annual Meeting, Waco, TX Abstract Title: *Impaired sweating responses to a passive whole-body heat stress in*

individuals with multiple sclerosis

Award: \$250

2017 Poster Award – 3rd Place-PhD Category

Texas Chapter-American College of Sports Medicine Annual Meeting, Waco, TX Abstract Title: *Impaired sweating responses to a passive whole-body heat stress in individuals with multiple sclerosis*

Award: \$50

2015 Dean's Departmental Award

SMU Research Day, Southern Methodist University, Dallas, TX

Abstract Title: The effect of multiple sclerosis on carotid baroreflex control of heart

rate and blood pressure

Award: \$250

Kelly Lenz (Undergraduate Student)

2018 Poster Award – 3rd Place-Undergraduate Category

Texas Chapter-American College of Sports Medicine Annual Meeting, Austin, TX Abstract Title: Carotid baroreflex responses to simulated hypotension are blunted

during passive whole-body heat stress in young women

Award: \$50

Mu Huang (PhD Student)

2017 Caroline tum Suden/Frances A. Hellebrandt Professional Opportunity Award

American Physiological Society Experimental Biology, Chicago, IL

Abstract Title: Preserved tolerance to lower-body negative pressure in individuals with multiple sclerosis during heat stress

Award: \$500 plus meeting registration reimbursement

2016 President's Cup Award*

Texas Chapter-American College of Sports Medicine Annual Meeting, College Station, TX

Abstract Title: Decreases in core temperature and sweating onset during wholebody heating in individuals with multiple sclerosis following administration of 4aminopyridine

Award: Represent TACSM in President's Cup competition at National ACSM meeting

*Selected as the top research presentation at the entire meeting and received traveling President's Cup plaque to display.

2016 Poster Award – 1st Place-PhD Category

Texas Chapter-American College of Sports Medicine Annual Meeting, College Station, TX

Abstract Title: Decreases in core temperature and sweating onset during wholebody heating in individuals with multiple sclerosis following administration of 4aminopyridine

Award: \$250

2016 Dean's Departmental Award

SMU Research Day, Southern Methodist University, Dallas, TX

Abstract Title: Decreases in core temperature and sweating onset during whole-body heating in individuals with multiple sclerosis following administration of 4-

aminopyridine Award: \$250

2015 Best Poster Award*

American Physiological Society-Neural Control & Autonomic Regulation Section

Experimental Biology, Boston, MA

Abstract Title: The effect of multiple sclerosis on carotid baroreflex control of heart

rate and blood pressure

Award: \$1,000

*Selected as one of top twelve abstracts by the NCAR organizing committee from abstracts submitted by trainees (students and post-doctoral fellows) for Data NCARnation competition at Experimental Biology in Boston MA. His abstract was selected as the <u>top</u> abstract in the NCARnation competition based upon of a five

slide, five-minute oral presentation and poster session.

2015 Dean's Departmental Award

SMU Research Day, Southern Methodist University, Dallas, TX

Abstract Title: Thermoregulatory dysfunction in multiple sclerosis patients during

moderate exercise in a thermoneutral environment

Award: \$250

Academic Course Development:

| 2020-current APSM 4361 | Research Practicum | Southern Methodist University |
|------------------------|---------------------------------|-------------------------------|
| 2019-current APSM 7x04 | Research & Dissertation Hours | Southern Methodist University |
| 2018-current APSM 4312 | Physiology of Health & Disease | Southern Methodist University |
| 2014-current APSM 7302 | Research Tutorial in Physiology | Southern Methodist University |
| 2012-current APSM 7300 | Graduate Independent Study | Southern Methodist University |
| 2011-current APSM 3411 | Physiology of Exercise w/Lab | Southern Methodist University |
| 2011-current APSM 2442 | Human Anatomy & Physiology II | Southern Methodist University |
| 2011-current APSM 2441 | Human Anatomy & Physiology I | Southern Methodist University |
| 2011-2020 APSM 5361 | Research Practicum | Southern Methodist University |
| 2010 APSM 3311 | Physiology of Exercise | Southern Methodist University |
| 2001 ESS 5850 | Athlete Assessment | University of Utah |

Academic Course Instruction:

| 2012-current | APSM 3411 | Physiology of Exercise w/Lab | Southern Methodist University |
|--------------|-----------|--------------------------------------|-------------------------------|
| 2024-current | APSM 4305 | Applied Physiology Research & Ethics | Southern Methodist University |
| 2020-current | APSM 4361 | Research Practicum | Southern Methodist University |
| 2019-current | APSM 7x04 | Research & Dissertation Hours | Southern Methodist University |
| 2018-current | APSM 4312 | Physiology of Health & Disease | Southern Methodist University |

| 2014-current | APSM 7302 | Research Tutorial in Physiology | Southern Methodist University |
|--------------|-----------|---------------------------------|-------------------------------|
| 2012-current | APSM 7300 | Graduate Independent Study | Southern Methodist University |
| 2011-current | APSM 2442 | Human Anatomy & Physiology II | Southern Methodist University |
| 2011-current | APSM 2441 | Human Anatomy & Physiology I | Southern Methodist University |
| 2024 | APSM 3321 | Biomechanics | Southern Methodist University |
| 2011-2020 | APSM 5361 | Research Practicum | Southern Methodist University |
| 2015-2018 | APSM 4412 | Advanced Exercise Physiology | Southern Methodist University |
| 2010-2013 | APSM 3311 | Physiology of Exercise | Southern Methodist University |
| 2001 | ESS 5850 | Athlete Assessment | University of Utah |
| 2001 | ESS 2500 | Exploration of Movement Science | University of Utah |
| 1995 | PEPR 3010 | Pre-Clinical Experience | University of Wyoming |

Academic Course Co-Instruction:

| 1999 | ESS 2791 | Physiology of Fitness | University of Utah |
|------|----------|-----------------------|-----------------------|
| 1996 | ESS 2040 | Human Anatomy | University of Wyoming |

Academic Course Guest Instruction:

| 1999-2001 | ESS 6300 | Advanced Exercise Physiology | University of Utah |
|-----------|----------|------------------------------|--------------------|
| 1999 | ESS 2791 | Physiology of Fitness | University of Utah |

Laboratory Course Instruction:

| 2002 | ESS 6300 | Advanced Ex. Physiology Lab. | University of Utah |
|-----------|------------|--------------------------------|-----------------------|
| 1997-1998 | ESS 366L | Exercise Physiology Laboratory | University of Utah |
| 1994-1996 | PEPR 3021L | Exercise Physiology Laboratory | University of Wyoming |
| 1994-1996 | PEPR 2040L | Human Anatomy Laboratory | University of Wyoming |

Activity Class Instruction:

| 1996-1998 | ESS 110 | Beginning Weight Training | University of Utah |
|-----------|-----------|-------------------------------|-----------------------|
| 1996-1998 | ESS 111 | Intermediate Weight Training | University of Utah |
| 1996-1998 | ESS 115 | Basketball | University of Utah |
| 1996-1998 | ESS 145 | Elementary Racquetball | University of Utah |
| 1998 | ESS 146 | Intermediate Racquetball | University of Utah |
| 1994 | PEAC 1271 | Weight Loss Conditioning | University of Wyoming |
| 1994 | PEAC 1272 | Cardiovascular Conditioning | University of Wyoming |
| 1994 | PEAC 1273 | Heavy Resistance Conditioning | University of Wyoming |

PROFESSIONAL, UNIVERSITY, & PUBLIC SERVICE

Professional Organizations:

American Physiological Society

American College of Sports Medicine

American College of Sports Medicine – Texas Regional Chapter

American Heart Association

Professional Service:

Board Positions:

2021-current Treasurer

Board of Directors

American College of Sports Medicine – Texas Regional Chapter

2020-2021 Past-President

Board of Directors

American College of Sports Medicine – Texas Regional Chapter

2019-2020 President

Board of Directors

American College of Sports Medicine – Texas Regional Chapter

2018-2019 President-Elect

Board of Directors

American College of Sports Medicine – Texas Regional Chapter

2016-2018 Non-Medicine Representative

Board of Directors

American College of Sports Medicine – Texas Regional Chapter

2011-current Advisory Board Member

David M. Crowley Laboratory for Research & Rehabilitation

Department of Physical Therapy School of Health Professions

University of Texas Southwestern Medical Center, Dallas, TX

Peer Reviewing Activities:

Ad-hoc Reviewer: Journal of Physiology

American Journal of Physiology: Regulatory, Integrative, & Comparative

Physiology

American Journal of Physiology: Heart & Circulatory Physiology

Journal of Applied Physiology Experimental Physiology

European Journal of Physiology

Medicine & Science in Sports & Exercise Autonomic Neuroscience: Basic & Clinical Archives of Physical Medicine & Rehabilitation

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Pediatrics

Journal of Thermal Biology Journal of Physiological Sciences

Microvascular Research Physiology & Behavior Multiple Sclerosis Journal

University Service:

| 2025-current | Faculty Senate Executive Committee |
|--------------|--|
| 2024-current | Faculty Senate |
| 2020-current | Educational Policies Committee |
| 2017-current | Faculty Senate Subcommittee on Ethics and Tenure |
| 2010-current | Health Professions Recommendation Committee |
| 2016-2024 | Chair, Institutional Animal Care and Use Committee (IACUC) |
| 2020-2022 | Council on General Education |
| 2019-2020 | Faculty Search Committee – Ballet Artist in Residence, Division of Dance, Meadows School of the Arts |
| 2019-2020 | Faculty Search Committee – Tenure-track in Biology, Department of Biology, Dedman College of Humanities & Sciences |
| 2018-2019 | Faculty Search Committee – Tenure-track in Biology, Department of Biology, Dedman College of Humanities & Sciences |
| 2016-2019 | General Education Review Task Force Appointed by Provost to revise and refresh university-wide general education curriculum |
| 2017 | Faculty Search Committee – Tenure-track in Health Neuropsychology, Department of Psychology, Dedman College of Humanities & Sciences |
| 2019 | Common Curriculum Exploring Science Breadth Committee |
| 2015-2017 | Faculty Senate Subcommittee on the Academic Calendar |
| 2014 | Faculty Search Committee - Tenure-track in Psychology, Department of Psychology, Dedman College of Humanities & Sciences |
| 2012-2014 | Institutional Review Board (IRB) |
| | |

School Service:

| 2013-current | PhD Committee |
|--------------|---|
| 2017-current | Faculty Tenure and Promotion Review Committee |
| 2013-2016 | Technology Committee |
| 2015-2016 | Academic Affairs Council |

Department Service:

2024-2025 Faculty Search Committee – Chair Applied Physiology & Sports Management

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| 2024-2025 | Faculty Search Committee – Tenure-track in Sport Management |
|-----------|---|
| 2024 | Faculty Search Committee – Clinical Non-tenure Track in Sport Management |
| 2022 | Chair, Faculty Search Committee – Chair Applied Physiology & Sports Management |
| 2020 | Faculty Tenure and Promotion Review Committee |
| 2019-2020 | Faculty Search Committee – Lecturer of Sports Management |
| 2018-2019 | Faculty Search Committee – Lecturer in Sports Management |
| 2017-2018 | Faculty Search Committee – Director of Sports Management |
| 2017-2018 | Faculty Search Committee – Lecturer in Sports Management |
| 2015-2016 | Applied Physiology & Health Management Concentration Curriculum Revision Committee |
| 2014 | Faculty Search Committee – Lecturer in Sports Performance & Leadership |
| 2013-2014 | Faculty Search Committee – Tenure-track in Applied Physiology & Enterprise |
| 2012-2013 | Faculty Search Committee – Tenure-track in Applied Physiology & Enterprise |
| 1999-2000 | Graduate Student Representative, Faculty Search Committee, Department of Exercise & Sport Science, University of Utah, Salt Lake City, UT |
| 1995-1996 | Graduate Student Representative, Graduate Faculty Committee, School of Physical & Health Education, University of Wyoming, Laramie, WY |

Professional Development:

2016 2016 Emerging Leaders Seminar Series

Office of the Provost

Southern Methodist University, Dallas, TX