

Keisa Williams Mathis, PhD, FAHA

Associate Professor of Internal Medicine and Physiology
University of Texas Southwestern, Dallas, TX

INFORMATION



Citizenship
USA

Place of Birth
Baton Rouge, LA

Race/Nationality
Black American

Sex/Gender (pronouns)
Female (she/her/hers)

Business Contact
5323 Harry Hines Boulevard
Dallas, TX ▪ 75390-8884
214-648-6137 (Office)
keisa.mathis@unthsc.edu

Personal Contact
8629 Paper Birch Lane
Fort Worth, TX ▪ 76123-5059
225-413-2756 (Cell)
keisamathisphd@gmail.com

Internet and Social Media

- Website: www.themathislaboratory.org
- Facebook: <https://www.facebook.com/MatLabResearch>
- X: @fizzydoc
- LinkedIn: <https://www.linkedin.com/in/keisa-mathis-5a12b510/>

APPOINTMENTS

PRIMARY

Associate Professor with Tenure 07/2023-Present
Department of Internal Medicine-Division of Rheumatic Diseases and Department of Physiology, *University of Texas Southwestern (UTSW), Dallas, TX*

OTHERS

Associate Professor with Tenure-School of Biomedical Sciences (SBS) 09/2022-07/2023
Department of Physiology and Anatomy, *University of North Texas Health Science Center (UNTHSC), Fort Worth, TX*

Adjunct Professor-College of Engineering 01/2021-Present
Department of Biomedical Engineering, *University of North Texas (Main Campus), Denton, TX*

Assistant Professor-School of Biomedical Sciences (SBS) 06/2014-08/2022
Department of Physiology and Anatomy (formerly Institute of Cardiovascular & Metabolic Diseases (ICMD) and the Graduate School of Biomedical Sciences (GSBS)), *University of North Texas Health Science Center (UNTHSC), Fort Worth, TX*

Assistant Professor 01/2014-05/2014
Department of Physiology and Biophysics, *University of Mississippi Medical Center, Jackson, MS*

Instructor 04/2010-12/2013
Department of Physiology and Biophysics, *University of Mississippi Medical Center, Jackson, MS*

EDUCATION AND TRAINING

Post-Doctoral Fellow 07/2009-05/2014
Department of Physiology and Biophysics, *University of Mississippi Medical Center, Jackson, MS*
Mentor: Michael Ryan, PhD

PhD in Physiology Department of Physiology, <i>Louisiana State University Health Sciences Center, New Orleans, LA</i> Mentor: Patricia Molina, MD, PhD	08/2005-05/2009
MS in Physiology Department of Physiology, <i>Louisiana State University Health Sciences Center, New Orleans, LA</i> Mentor: Patricia Molina, MD, PhD	08/2003-08/2005
MS in Applied Physics Department of Physics, <i>Purdue University, West Lafayette, IN</i> Faculty Advisor: Nicholas Giordano, PhD	08/2001-08/2003
BS in Physics, Mathematics Minor <i>Southern University and A&M College, Baton Rouge, LA</i> Faculty Advisors: Diola Bagayoko, PhD and Stephen McGuire, PhD	06/1997- 05/2001

ACADEMIC AND PROFESSIONAL HONORS AND RECOGNITION

HONORS

2022	UNTHSC Faculty Achievement Award (University-wide Faculty of the Year; https://www.unthsc.edu/newsroom/story/2022-faculty-achievement-award-winner-announced/?utm_campaign=daily_news_email&utm_source=email)
2022	SBS Faculty Achievement Award Finalist
2022	UNTHSC Graduate Student Association Outstanding Faculty Member
2022	Golden Apple Award (UNTHSC SBS Teacher of the Year)
2022	Arthur C. Guyton Award for Excellence in Integrative Physiology, <i>American Physiological Society (APS)</i>
2021	1000 Inspiring Black Scientists, <i>Cell Mentor, Cell Press</i> (https://crosstalk.cell.com/blog/1000-inspiring-black-scientists-in-america)
2018	40 Under Forty, <i>Southern University Alumni Federation</i>
2016	Fellow of the American Heart Association (FAHA), <i>American Heart Association</i>
2016	Dale J. Benos Early Career Professional Service Award, <i>American Physiological Society</i>
2013	Juan Carlos Romero Postdoctoral Excellence Award, <i>Water and Electrolyte Homeostasis (WEH) Section of the APS</i>
2012	Finalist-Postdoctoral Research Recognition Award, <i>WEH Section of the APS</i>
2011	Caroline tum Suden Award (Postdoc), <i>APS</i>
2009	Finalist-Gordis Award, <i>Research Society on Alcoholism</i>
2009	Caroline tum Suden Award (Graduate Student), <i>APS</i>
2009	Graduate Oral Presentation Award (1 st place), <i>Louisiana Academy of Sciences, Southeastern Louisiana University, Hammond, LA</i>
2008-2009	K-12 Minority Outreach Fellow, <i>APS</i>
2007	Graduate Oral Presentation Award (2 nd place), <i>Louisiana Academy of Sciences, Southern University, Baton Rouge, LA</i>
2001-2003	Purdue Fellowship, <i>Purdue University, West Lafayette, IN</i>
2001	Honors Graduate, <i>Southern University, Baton Rouge, LA</i>
2001	Golden Key Honor Society, <i>Southern University, Baton Rouge, LA</i>
1997-2001	Timbuktu Academy Scholarship, <i>Southern University, Baton Rouge, LA</i>
1997-2001	Honors College Scholarship, <i>Southern University, Baton Rouge, LA</i>

OTHER ACHEIVEMENTS

2023	APS Select Award-January 2023, <i>American Journal of Physiology: Heart</i>
2022	Gold Award for Lab Efficiency Action Program (LEAP) Sustainability, <i>UNTHSC</i>
2020	Early Reviewer Program, <i>Center for Scientific Review (CSR)</i>
2013	Responsible Conduct of Research Certificate, <i>University of Mississippi Medical Center</i>
2011	International Society of Hypertension New Investigator Poster Award, <i>Orlando, FL</i>
2006-2009	Research Society on Alcoholism Student Merit Award, <i>San Diego, CA (2009), Baltimore, MD (2006)</i>

TRAVEL AWARDS

2023	FASEB CARES Award, <i>Federation of American Societies for Experimental Biology (FASAB)</i>
2022	Hypertension Caregiver Award, <i>Council on Hypertension, San Diego, CA</i>
2015	Physiology 2015 Travel Award, <i>Physiological Society, Cardiff, UK</i>
2014	Kidney Council New Investigator Travel Award, <i>American Heart Association (AHA)</i>
2013	Minority Travel Award, <i>APS, Boston, MA</i>
2011	FASEB/MARC Program Presentation Travel Award, <i>Washington, DC</i>
2007-2009	Research Society on Alcoholism Satellite Symposium Travel Grant, <i>San Diego, CA (2009), Washington, DC (2008), Chicago, IL (2007)</i>
2008	Professional Writing Skills Travel Award, <i>American Physiological Society, Orlando, FL</i>
2007	Alcohol and Trauma Satellite Meeting Travel Award, <i>Shock Society, Baltimore, MD</i>
2007	Professional Presentation Skills Travel Award, <i>American Physiological, Bethesda, MD</i>
2005-2012	National Institute on Diabetes and Digestive and Kidney Diseases (NIDDK) Minority Travel Award, <i>American Physiological Society, San Diego, CA (2012), New Orleans, LA (2009), San Diego, CA (2008), Washington, DC (2007), San Francisco, CA (2006), San Diego, CA (2005)</i>
2004	Alcohol and Immunology Research Interest Group Travel Grant, <i>Toronto, Canada</i>

RESEARCH FUNDING

ACTIVE

General Start-Up Fund (Mathis, PI) 07/2023-Present
UT Southwestern
Title/Description: Funds granted by the institution upon hiring

Lupus Idea Award (LR210096; Mathis, PI) 10/2022-9/2024
Department of Defense
Title/Description: Preventing Renal Injury in Lupus Nephritis via Ultrasound Therapy

R01 (R01HL153703-A1; Mathis, PI) 05/2021-04/2026
NIH NHLBI
Title/Description: Control of Renal Inflammation in Hypertension

Mentored K01 to Promote Faculty Diversity (K01HL139859, Mathis, PI) 01/2018-12/2023
NIH NHLBI
Title/Description: Neuroimmune Mechanisms Involved in the Pathogenesis of Hypertension and Renal Injury

COMPLETED

Department Seed Grant (Mathis & Cunningham, Co-PI) 10/2021-08/2022
UNTHSC-Department of Physiology
Title/Description: Intramural award to collect preliminary data for future grants

Loan Repayment Program (Mathis) 07/2020-06/2022
NIH NHLBI
Title/Description: Competitive award to pay off student loan debt of researcher

Postdoctoral Training Fellowship for Calvin Brooks (5T32AG020494-18; Mathis, Mentor) 05/2021-04/2022
Neurobiology of Aging and Alzheimer's Disease Training Program (UNTHSC Pharmacology and Neuroscience)
Title/Description: Departmental training grant

Department Seed Grant (Mathis, PI) 02/2021-08/2021
UNTHSC-Department of Physiology
Title/Description: Intramural award to collect preliminary data for future grants

Research Kickstart Program – Phase I (Mathis, PI) 07/2020
UNTHSC-Division of Research and Innovation
Title/Description: Intramural award to replenish lost lab resources during COVID-19

Novel Disease Grant (550778; Mathis, PI) 03/01/2018 – 04/30/2021
Keisa W. Mathis, PhD (05/2023) - 3

Title/Description: Targeting Nicotinic Receptors to Reduce Inflammation Associated with SLE

Intramural Research Honors Practicum for Shyam Vedantam (Mathis, PI) 06/2017

UNTHSC-TCOM

Title/Description: Neuroimmune control of renal inflammation in lupus hypertension

Predoctoral Fellowship for Grace Pham (16PRE29910012; Mathis, PI) 07/2016-06/2018

American Heart Association

Title/Description: The contribution of vagal tone to hypothalamic-pituitary-adrenal axis activity in SLE-mediated hypertension

Intramural Research Honors Practicum for Charles Maloy (Mathis, PI) 10/2015

UNTHSC-TCOM

Title/Description: Renal and Hypertension Outcomes Following Vagal Nerve Stimulation in Mice with Systemic Lupus Erythematosus

Scientist Development Grant (14SDG18320033; Mathis, PI) 1/2014-6/2018

American Heart Association

Title/Description: The role of the cholinergic anti-inflammatory pathway in renal function and hypertension

General Start-Up Fund (Mathis, PI) 06/2014-05/2017

UNT Health Sciences Center

Title/Description: Funds granted by the institution upon hiring

Institute for Cardiovascular and Metabolic Disease Seed Grant (Mathis, PI) 07/2016-08/2017

UNT Health Science Center

Title/Description: Impaired neuroimmune mechanisms in lupus hypertension; competitive grant to accelerate the research programs of UNTHSC faculty within ICMD

Intramural Seed Grant Program (Mathis, PI) 03/2015-08/2016

UNT Health Science Center, Division of Research & Innovation

Title/Description: Ultrasound as an Alternative Therapeutic Option for Lupus; competitive grant to advance and accelerate the research programs of UNTHSC faculty

Postdoctoral Fellowship (1F32HL114272-01A1; Mathis PI) 2/2013-12/2013

National Institutes of Health

Title/Description: The Role of T Lymphocytes in Hypertension during Chronic Inflammatory Disease

Postdoctoral Fellowship (2T32HL105324-03; Granger, PI) 09/2012-01/2013

Hypertension and Cardiorenal Diseases Research Training Program (University of Mississippi Medical Center)

Title/Description: Departmental training grant

Postdoctoral Fellowship (POST4350019; Mathis, PI) 07/2010-06/2012

American Heart Association

Title/Description: The Role of Renal Sympathetic Nerves in Lupus Hypertension

Minority Supplement Award (3R01HL085907-04S1; Ryan, PI) 04/2010-06/2010

National Institutes of Health

Title/Description: Supplement to mentor's NIH R01

Merck/Porter Physiology Fellow (Mathis, PI) 08/2008-05/2009

American Physiological Society

Title/Description: Competitive predoctoral fellowship; highest scored

Predoctoral Fellowship (5T32AA007577-09; Bagby PI) 09/2005-08/2008

Biomedical Alcohol Research Training Program (LSU Health Sciences Center)

Description: Departmental training grant

JOURNAL ARTICLES

- 1) Tao Y, Young-Stubbs C, Yazdizadeh Shotorbani P, Su Dong-Ming, **Mathis KW**, Ma, R. Sex And Strain Differences in Renal Hemodynamics in Mice. Accepted 02.25.2023. *Physiological Reports*.
- 2) Chaudhari S, D'Souza BM, Morales JY, Young-Stubbs CM, Shimoura CG, Ma R, **Mathis KW**. Renal TLR-7/TNF- α pathway as a potential female-specific mechanism in the pathogenesis of autoimmune-induced hypertension. *AJP Heart Circ Physiol*. 2022;323(6):H1331-H1342. [PMID: 36367687](#) **Recognized by AJP Heart for APS Select**
- 3) Chaudhari S, Shotorbani PY, Tao Y, Kasetti R, Zode G, **Mathis KW**, and Ma R. Neogenin pathway positively regulates fibronectin production by glomerular mesangial cells. *AJP Cell Physiology*. 2022; 323(1):C226-C235. [PMID:35704698](#)
- 4) Morales JY, Young-Stubbs CM, Shimoura CG, Kem WR, Uteshev VV, **Mathis KW**. Systemic administration of $\alpha 7$ -nicotinic acetylcholine receptor ligands does not improve renal injury or behavior in mice with advanced systemic lupus erythematosus. *Frontiers in Medicine*. 2021; 8:642960. [PMID: 33928103](#)
- 5) Pham GS*, Shimoura CG*, Chaudhari SS, Kulp DV, **Mathis KW**. Chronic unilateral cervical vagotomy reduces renal inflammation, blood pressure, and renal injury in a mouse model of lupus. *Am J Physiol Renal Physiol*. 2020; 319(2):F155-F161. [PMID: 32538149](#)
- 6) Pham GS, Wang LA, **Mathis KW**. Pharmacological potentiation of the efferent vagus nerve attenuates blood pressure and renal injury in a murine model of systemic lupus erythematosus. *AJP – Regulatory*. 2018; 315:R1261-1271. [PMID: 30332305](#)
- 7) Pham GS and **Mathis KW**. Lipopolysaccharide challenge reveals hypothalamic-pituitary-adrenal axis dysfunction in murine systemic lupus erythematosus. *Brain Sciences*. 2018; 8(10). [PMID: 30287776](#)
- 8) Syed M, Ball JP, **Mathis KW**, Hall ME, Ryan MJ, Rothenberg ME, Yanes Cardozo LL, Romero DG. MicroRNA-21 Ablation Exacerbates Aldosterone-Mediated Cardiac Injury, Remodeling and Dysfunction. *AJP: Endocrinology and Metabolism*. 2018; 315(6):E1154-E1167. [PMID: 30153065](#)
- 9) Rodriguez R, Lee A, **Mathis KW**, Broome HJ, Thorwald M, Martinez B, Nakano D, Nishiyama A, Ryan MJ, Ortiz RM. Angiotensin receptor and TNF- α activation contribute to glucose intolerance independent of systolic blood pressure in OLETF rats. *AJP: Renal*. 2018; 315(4):F1081-F1090. [PMID: 29993275](#)
- 10) **Mathis KW**, Taylor EB, Ryan MJ. Anti-CD3 antibody therapy attenuates the progression of hypertension in female mice with systemic lupus erythematosus. *Pharmacological Research*. 2017; 120:252-257. [PMID: 28400152](#)
- 11) Fairley AS, **Mathis KW**. Cholinergic agonists reduce blood pressure in mouse model of systemic lupus erythematosus. *Physiological Reports*. 2017; 5(7):e13213. [PMID: 28400502](#)
- 12) **Mathis KW**, Wallace K, Flynn E, Maric C, LaMarca B, Ryan MJ. Preventing autoimmunity protects from hypertension and renal injury. *Hypertension*. 2014; 64(4):792-800. [PMID: 25024282](#)
- 13) Gilbert EL, **Mathis KW**, Venegas-Pont M, and Ryan MJ. 17 β -Estradiol protects against the progression of hypertension during adulthood in a mouse model of systemic lupus erythematosus. *Hypertension*. 2014 ;63(3):616-623. [PMID: 24366082](#)
- 14) **Mathis KW**, Venegas-Pont M, Flynn E, Williams JM, Maric C, Dwyer T, Ryan MJ. Hypertension in an experimental model of systemic lupus erythematosus occurs independently of the renal nerves. *American Journal of Physiology: Regulatory, Integrative and Comparative Physiology*. 2013; 305(7):711-719. [PMID: 23926131](#)
- 15) **Mathis KW**, Venegas-Pont M, Masterson CW, Stewart, NJ, Wasson KL, and Ryan MJ. Oxidative stress promotes hypertension and albuminuria during the autoimmune disease systemic lupus erythematosus. *Hypertension*. 2012; 59(3):673-679. [PMID: 22291449](#)
- 16) **Mathis KW**, Venegas-Pont M, Masterson CW, Wasson KL, Ryan MJ. Blood pressure in a hypertensive mouse model of SLE is not salt-sensitive. *American Journal of Physiology: Regulatory, Integrative and Comparative Physiology*. 2011; 301:R1286-1292. [PMID: 21917908](#)
- 17) Venegas-Pont M, **Mathis KW**, Ilescu R, Ray WH, Glover P, and Ryan M. Blood pressure and renal hemodynamic responses to acute angiotensin II infusion are enhanced in a female mouse model of systemic lupus erythematosus. *American Journal of Physiology: Regulatory, Integrative and Comparative Physiology*. 2011; 301:R1281-1285. [PMID: 21900645](#)
- 18) **Mathis KW**, Molina PE. Systemic administration of an acetylcholinesterase inhibitor improves outcome and survival from hemorrhagic shock during acute alcohol intoxication. *Shock*. 2010; 34(2):162-168.
- 19) Whitaker A, Sulzer J, Walker E, **Mathis K**, Molina PE. Sympathetic modulation of the host defense response to infectious challenge during recovery from hemorrhage. *Neuroimmunomodulation*. 2010; 17:349-358. [PMID: 20516716](#)
- 20) **Mathis KW**, Molina PE. Central acetylcholinesterase inhibition improves hemodynamic counter-regulation following severe blood loss in alcohol-intoxicated rodents. *American Journal of Physiology: Regulatory and Comparative Physiology*. 2009; 297(2): R437-R445. [PMID: 19515985](#)

- 21) **Mathis KW**, Molina PE. Transient central cholinergic activation enhances sympathetic nervous system activity but does not improve hemorrhage-induced hypotension in alcohol-intoxicated rodents. *Shock*. 2009; 32(4):410-415. [PMID: 19197225](#)
- 22) Greiffenstein P, **Mathis KW**, Vande Stouwe C, Molina PE. Alcohol binge prior to trauma/hemorrhage impairs integrity of host defense mechanisms during recovery. *Alcoholism: Clinical and Experimental Research*. 2007; 31(4):1-12. [PMID: 17374050](#)
- 23) **Mathis KW**, Zambell K, Olubadewo J, Molina PE. Altered hemodynamic counterregulation to hemorrhage by acute moderate alcohol intoxication. *Shock*. 2006; 26(1):55-61. [PMID: 16783199](#)

REVIEWS

- 24) Tao Y, Mallet R, **Mathis KW**, Ma R. Store-Operated Ca²⁺ Channel Signaling: Novel mechanism for podocyte injury in kidney disease. (Accepted 09.02.2022 – *Experimental Biology and Medicine*) PMID: 36533574
- 25) Chaudhari S, Pham GS, Brooks C, Dinh V, Stubb-Young C, Gusson CS, **Mathis KW**. Should renal inflammation be targeted while treating hypertension? *Frontiers in Physiology*. 2022; 13:886779. [PMID:35770194](#)
- 26) Chaudhari S, Cushen S, Oluwatobiloba O, Paresh J, Posey R, **Mathis K**, Gouloupoulou S. Mechanisms of sex disparities in cardiovascular function and remodeling. *Comprehensive Physiology*. 2018; 9(1):375-411. [PMID: 30549017](#)
- 27) **Mathis KW**. An impaired neuroimmune pathway promotes the development of hypertension in the setting of chronic inflammation. *American Journal of Physiology: Regulatory*. 2015; 309(9):1074-1077. [PMID: 26084696](#)
- 28) Park S, **Mathis KW**, Lee IK. The physiological roles of apolipoprotein J/clusterin in metabolic and cardiovascular diseases. *Reviews in Endocrine and Metabolic Disorders*. 2014; 15(1):45-53. [PMID: 24097125](#)
- 29) **Mathis KW**, Broome HJ, Ryan MJ. Autoimmunity: an underlying factor in the pathogenesis of hypertension. *Current Hypertension Reports*. 2014; 16(4):424. [PMID: 24535221](#)

BOOK CHAPTERS

- 30) **Mathis KW**, Park J. Vagus Nerve Stimulation and Kidney Function. Elsevier. *Submitted*.
- 31) Shadiack A, **Mathis KW**. Chapter 13.1: Hypertension. *Introduction to Clinical Pharmacology: From Symptoms to Treatment*. Accepted. 05.17.23
- 32) Pham GS, **Mathis KW**. Autoimmunity, Estrogen and Lupus. In: Sex Differences in Cardiovascular Physiology and Pathophysiology: editors: Lamarca and Alexander. Alexander BT, Lamarca B, editors. USA: Elsevier Academic Press; 2019. Chapter 14; p.219-237. [link](#)

EDITORIALS

- 33) Robinson A, Jenkins N, Sanchez S, Haack K, Lee D, **Mathis KW**, and Warrington J. Supporting and promoting Black physiologists: How can the APS help. *AJP Heart*. Accepted 03.20.23
- 34) Shimoura CG, Wallace K, **Mathis KW**. Renal injury and the brain. *Frontiers*. Accepted 12.12.22
- 35) **Mathis KW**, Reynolds CL, Williams CR. Being Black in Physiology. *Kidney News*. 2022; 14(4):19. [link](#)
- 36) **Mathis KW** and Balmain B. Mentoring Q&A – Let's Get it Started: How to Transition to a Faculty Member and Build Your Own Lab. *The Physiologist Magazine*. May 2021: 10-11. [link](#)
- 37) Shimoura CG, **Mathis KW**. When memory does not serve you well. *Circulation Research*. 2020; 126(6):722-724. [PMID: 32163345](#)
- 38) Williams EN, **Mathis KW**. Buffering Chronic Kidney Disease with Sodium Bicarbonate. *Clinical Science*. 2018; 132(17):1999-2001. [PMID: 30220653](#)
- 39) **Mathis KW**. Complementing T regulatory cells to combat hypertension. *Circulation Research*. 2018; 122(7):911-912. [PMID: 29599271](#)
- 40) **Mathis KW**. The W's of Networking in Physiology. *The Physiologist*. 2015; 58(4): 197-199. [PMID: 26434159](#)

ABSTRACTS

- 1) Dinh VQ, Mathis KW. Seasonal travel stressors impact the development of hypertension in female lupus mice. APS Summit 2023, Long Beach, CA.
- 2) Chaudhari S, Young-Stubbs CM, Shimoura CG, Luedtke R, Mathis KW. Effect of Sigma-1 Receptor Activation on Renal Injury and Hypertension in Female Mice with Lupus. APS Summit 2023, Long Beach, CA.
- 3) Dinh VQ, **Mathis KW**. Seasonal Travel Stressors Modulates Hypertension in Adult Female Lupus Mice. Council on Hypertension 2022, San Diego. *Hypertension*. 2022;79:A097
- 4) Shimoura CG, Young-Stubbs CM, Chaudhari S, Dinh VQ, **Mathis KW**. Long-term augmentation of acetylcholine bioavailability halts the progression of lupus hypertension. Council on Hypertension 2022, San Diego.
- 5) Dinh VQ, Chaudhari SK, **Mathis KW**. Travel-Induced Stress at Varying Ages Modulates the Pathogenesis of Autoimmunity in Female Lupus Mice. UNTHSC Research Appreciation Day 2022.

- 6) Brooks CD, Young-Stubbs CM, Shimoura CG, Dinh VQ, Chaudhari SK, Uteshev VV, **Mathis KW**. Effect of systemic administration of $\alpha 7$ -nicotinic acetylcholine receptor ligands on renal inflammation in young mice with systemic lupus erythematosus. UNTHSC Research Appreciation Day 2022.
- 7) **Mathis KW**, Shimoura CG, Young-Stubbs CM, Brooks C. Central Activation of the Cholinergic Anti-Inflammatory Pathway Improves Outcome in a Murine Model of Systemic Lupus Erythematosus. FASEB 36: S1. Experimental Biology 2022, Philadelphia. <https://doi.org/10.1096/fasebj.2022.36.S1.R6054>
- 8) Chaudhari S, D'Souza BM, Morales JY, Lima C, Young-Stubbs CM, Ma R, **Mathis, KW**. Renal TLR7 expression is associated with renal injury in female mouse model of systemic lupus erythematosus. Experimental Biology 2022, Philadelphia.
- 9) CG Shimoura, CM Young-Stubbs, C Brooks, **KW Mathis**. Selective activation of DMV neurons improves renal injury in systemic lupus erythematosus. AHA Council on Hypertension 2021 (virtual)
- 10) **KW Mathis**, JY Morales, CM Young-Stubbs, CG Shimoura, WR Kem, VV Uteshev. Potentiation of acetylcholine does not improve renal inflammation and behavior in female mice with late-stage systemic lupus erythematosus. FASEB 2021 (virtual)
- 11) RL Hartman and **KW Mathis**. Early life stress in summer months accelerates the progression of autoimmunity in female lupus-prone mice. FASEB 2021 (virtual) and RAD 2021 (virtual).
- 12) DV Kulp, CM Young-Stubbs, **KW Mathis**. Immunological alterations in murine systemic lupus erythematosus following $\alpha 7$ -nicotinic acetylcholine receptor antagonism. RAD 2021 (virtual).
- 13) **KW Mathis**, C Young-Stubbs, and JY Morales. Sex Differences in the Development of Autoimmune-Associated Hypertension. *Hypertension*. 74:Suppl 1, New Orleans, 2019.
- 14) **KW Mathis**, GS Pham, DV Kulp. Disruption of splenic nerve-to-spleen neurotransmission worsens disease outcome in a murine model of systemic lupus erythematosus. FASEB J 33, Suppl 2019.
- 15) **KW Mathis**. Sex differences in the development of autoimmune-induced hypertension. UNTHSC Women's Brain and Cardiovascular Health Symposium, Fort Worth, TX 2019.
- 16) **KW Mathis**, H Stauss, GS Pham, DV Kulp, S Kim. Effects of vagus nerve stimulation in a murine model of systemic lupus erythematosus. FASEB, San Diego, CA 2018.
- 17) GS Pham, B Osuzawa, O Thomas, S Vendantam, DL Fancher, **KW Mathis**. Splenic 6-hydroxydopamine worsens renal inflammation and injury in a murine model of systemic lupus erythematosus. FASEB, San Diego, CA 2018.
- 18) S Vedantam, GS Pham, **KW Mathis**. Effect of acute bilateral vagotomy on tissue-specific inflammation in a murine model of systemic lupus erythematosus. FASEB, San Diego, CA 2018.
- 19) GS Pham, SS Chaudhari, DL Fancher, TP Michaels, L D'Cunha, **KW Mathis**. Unilateral cervical vagotomy protects against renal injury and hypertension in a mouse model of lupus hypertension. AHA Council on Hypertension, 70:AP290 San Francisco, 2017.
- 20) GS Pham, AS Fairley, **KW Mathis**. Chronic vagal stimulation enhances norepinephrine-mediated inhibition of splenic pro-inflammatory cytokine release in lupus hypertension. *Hypertension*. 2016; 68; A088.
- 21) SL Njemanze, M Syed, LR Nair, JP Ball, **KW Mathis**, MJ Ryan, ME Rothenberg, LL Yanes-Cardozo and DG Romero. Micro-RNA-21 ablation exacerbates aldosterone-mediated renal injury. FASEB, San Diego, CA 2016.
- 22) GS Pham, AS Fairley, CI Maloy, **KW Mathis**. Chronic vagus nerve stimulation attenuates renal inflammation in autoimmune-induced hypertension. FASEB (962.7), San Diego, CA 2016.
- 23) CI Maloy, AS Fairley, GS Pham, **KW Mathis**. Improvement in blood pressure and renal injury following vagal nerve stimulation. FASEB (964.6), San Diego, CA 2016.
- 24) AS Fairley, GS Pham, H Colby, O Osikoya, S Gouloupoulou, CA Rickards, **KW Mathis**. Exploring Physiology with Elementary and Middle School Students. Experimental Biology, San Diego, 2016.
- 25) **KW Mathis**. Nerve-to-spleen pathway is critical in the development of hypertension in the setting of chronic inflammatory disease. Physiological Society, Cardiff, Wales, UK, 2015
- 26) **KW Mathis**. Evidence of an impaired neuroimmune pathway in autoimmune-associated hypertension. FASEB, Boston, 2015.
- 27) **KW Mathis**. Cholinergic agonists protect from the development of hypertension during chronic inflammatory disease. Submitted: *High Blood Pressure Research Council*, San Francisco, CA 2014.
- 28) M Syed, JP Ball, **KW Mathis**, M Hall, MJ Ryan ME Rothenberg, DG Romero. MicroRNA-21 ablation exacerbates aldosterone-mediated cardiac inflammation, fibrosis and hypertrophy. Submitted: *High Blood Pressure Research Council*, San Francisco, CA 2014.
- 29) K Wallace, **KW Mathis**, T Bowles, R Morris. Rats with hypertension, Hemolysis Elevated Liver Enzymes and Low Platelets (HELLP) have increased placental and circulating FASL. (LB713) FASEB, San Diego, CA 2014.
- 30) **KW Mathis**. Stimulation of a neuroimmune pathway protects from hypertension. (860.22) FASEB, San Diego, CA 2014.

- 31) **KW Mathis**. Nicotine reduces blood pressure in mouse model of systemic lupus erythematosus *FASEB*. 2013;27:1116.2.
- 32) **KW Mathis**, K Wallace, B LaMarca, MJ Ryan. Humoral immune system activation promotes the development of hypertension. *FASEB*. 2013;27:906.4
- 33) EL Gilbert, **KW Mathis**, MJ Ryan. 17 β -estradiol attenuates renal TNF α and the progression of hypertension in mice with systemic lupus erythematosus. (904.4) *FASEB*, Boston, MA 2013.
- 34) **KW Mathis**, K Wallace, KL Wasson, CW Masterson, B LaMarca, MJ Ryan. T cells promote the progression of hypertension and renal injury during systemic lupus erythematosus. *Hypertension*. 2012;60:A174.
- 35) EL Gilbert, **KW Mathis**, M Venegas-Pont, and MJ Ryan. Disparate temporal regulation of blood pressure by estrogens during systemic lupus erythematosus. *Hypertension*. 2012;60:A10.
- 36) **KW Mathis**, KL Wasson, CW Masterson, MJ Ryan. T lymphocytes promote autoimmune-associated hypertension. (879.2) *FASEB*, San Diego, CA, 2012.
- 37) EL Gilbert, M Venegas-Pont, **KW Mathis**, KL Wasson, MJ Ryan. Estrogen protects against hypertension during autoimmune-mediated hypertension. (880.3) *FASEB*, San Diego, CA, 2012.
- 38) **KW Mathis**, M Venegas-Pont, CW Masterson, KL Wasson, MJ Ryan. Hypertension in mice with the chronic inflammatory disease systemic lupus erythematosus is not salt-sensitive. 2011 APS Conference: Physiology of Cardiovascular Diseases: Gender Disparities. *The Physiologist*. 2011;54(6). Jackson, MS, October 2011.
- 39) **KW Mathis**, M Venegas-Pont, CW Masterson, WH Ray, KL Wasson, MJ Ryan. Oxidative stress promotes hypertension and renal injury during the chronic inflammatory disease systemic lupus erythematosus. High Blood Pressure Council, Orlando, FL. (P238) High Blood Pressure Council, Orlando, FL, September 2011.
- 40) M Venegas-Pont, **KW Mathis**, CW Masterson, WH Ray, AR Jones, P Glover and MJ Ryan. Antioxidant treatment lowers blood pressure and improves renal injury in a mouse model of systemic lupus erythematosus. *FASEB*, Washington, DC, 2011.
- 41) **KW Mathis**, M Venegas-Pont, WH Ray, CW Masterson, T Dwyer, MJ Ryan. Renal nerves contribute to renal injury, but not hypertension, during chronic inflammatory disease. *FASEB*, Washington, DC, 2011.
- 42) **KW Mathis**, M Venegas-Pont, WH Ray, T Dwyer, MJ Ryan. Renal denervation reduces albuminuria independently of arterial pressure in Systemic Lupus Erythematosus. (P468) High Blood Pressure Council, Washington, DC, October 2010.
- 43) **KW Mathis**, AM Whitaker, PE Molina. Acetylcholinesterase inhibitor improves hemodynamic counterregulation and survival from severe hemorrhagic shock during acute alcohol intoxication. *Research Society of Alcoholism. Alcoholism: Clinical and Experimental Research*. 2009;33(6S): 212A.
- 44) **KW Mathis** and PE Molina. Acetylcholinesterase inhibitor improves survival from hemorrhage in rodents. *FASEB*, New Orleans, LA, April 2009.
- 45) **KW Mathis** and PE Molina. Alcohol-induced hemodynamic instability during hemorrhagic shock is reversed by acetylcholinesterase inhibitor. *Alcoholism: Clinical and Experimental Research*. 2008;32(6S):30A. Washington, DC, July 2008.
- 46) **KW Mathis** and PE Molina. Central neostigmine administration reverses alcohol- and hemorrhage-induced hypotension. (1227.9) *FASEB*, San Diego, CA, April 2008.
- 47) **KW Mathis**, AM Whitaker, and PE Molina. Effective mechanisms in restoring blood pressure following hemorrhage. (1227.16) *FASEB*, San Diego, CA, April 2008.
- 48) **KW Mathis** and PE Molina. Central choline-mediated sympathetic outflow does not attenuate hypotensive response to blood loss in acute alcohol-intoxicated rodents. *Research Society on Alcoholism. Alcoholism: Clinical and Experimental Research*. 2007;31(6S):98A. Chicago, IL, July 2007.
- 49) **K Mathis** and P Molina. Transient sympathetic nervous system activation does not alter early tissue inflammatory responses to hemorrhagic shock. *Shock*. 2007;27(S1): 37 (P40) Baltimore, MD, June 2007.
- 50) **KW Mathis**, P Greiffenstein, C Vande Stouwe, PE Molina. Noradrenergic modulation of systemic response to infection. *Society on Neuroimmune Pharmacology*. Salt Lake City Utah, April 2007.
- 51) **KW Mathis** and PE Molina. Short-term central activation of descending sympathetic outflow does not restore alcohol-induced hemodynamic instability during hemorrhagic shock. (914.9) *FASEB*, Washington, DC, April 2007.
- 52) **KW Mathis**, Z Zhang, P Greiffenstein, PE Molina. Acute alcohol intoxication does not modulate cardiovascular and neuroendocrine response to immobilization stress. *Alcoholism: Clinical and Experimental Research*. 2006;30(6S1):74A. Baltimore, MD, June 2006.
- 53) PE Molina, C Vande Stouwe, **KW Mathis**, P Greiffenstein. Contribution of soft tissue trauma to pro-inflammatory response following trauma/hemorrhage. *Shock*. 2006;25(S1): 1-98. (P199) Broomfield, CO, June 2006.
- 54) **KW Mathis**, K Zambell, J Olubadewo, PE Molina. Alcohol binge suppresses early lung TNF expression following trauma and hemorrhagic shock. *FASEB*, San Francisco, CA, April 2006.

- 55) **KC Williams**, J Olubadewo, J Varela, J Carnel, C Vande Stowe, and P Molina. Short-term moderate alcohol intoxication impairs hemodynamic and immune response to hemorrhagic shock. (685.8) FASEB, San Diego, CA, April 2005.

INVITED TALKS

INTERNATIONAL

- 1) Invited Speaker, "Control of Renal Inflammation in Autoimmune-Induced Hypertension." Department of Pharmacology, Ribeirao Preto Medical School, University of Sao Paulo, Brazil, August 2021. (virtual)
- 2) Invited Lecturer, "Primer on Experimental Approaches to investigate Cardiovascular Physiology." 2nd Pan-American Congress of Physiological Sciences Congress, Havana, Cuba, May 2019.
- 3) Invited Speaker, "Nerve-to-spleen pathway is critical in the development of hypertension in the setting of chronic inflammatory disease." Physiological Society, Cardiff, Wales, UK, July 2015.

NATIONAL

- 1) Invited Speaker, LSU Health Sciences Center Postbaccalaureate Research Education Program in Biomedical Sciences Keynote, May 2024.
- 2) Invited Speaker, "Why Am I Here: Career Paths in Biomedical Sciences", VA Summer Research Program, University of South Carolina, June 2023.
- 3) Invited Speaker, American Physiological Summit 2023, "NIH Suggestions to Enhance Rigor, Transparency and Translatability in Animal Research", Long Beach, CA, April 2023.
- 4) Invited Speaker, Vanderbilt University Medical Center, "Neuroimmune Communication in Health, Hypertension and Renal Inflammatory Diseases", January 2023
- 5) Invited Speaker, UT Arlington, "Neuroimmune Communication in Health, Hypertension and Renal Inflammatory Diseases", January 2023
- 6) Invited Speaker, Howard University, "Neuroimmune Communication in Health, Hypertension and Renal Inflammatory Diseases", January 2023
- 7) Invited Speaker, UT Southwestern, Rheumatology, "Using a Mouse Model of Lupus to Understand Mechanisms of Autoimmune-Induced Hypertension and Renal Injury", January 2023
- 8) Invited Speaker, Tulane University School of Medicine, Department of Physiology, "Neuroimmune Communication in Health, Hypertension and Renal Inflammatory Diseases", November 2022
- 9) Invited Speaker, Texas Tech University Health Science Center, "What A Difference an X Makes: The Mechanisms Contributing to the Development and Maintenance of Autoimmune-Induced Hypertension", October 2022
- 10) Invited Speaker, Drexel University College of Medicine, Department of Pharmacology and Physiology, "Neuroimmune Communication in Health, Hypertension and Renal Inflammatory Diseases", Philadelphia, September 2022
- 11) Invited Speaker, University of Mississippi Medical Center, Department of Physiology, "Understanding the Pathogenesis of Lupus Hypertension and Renal Injury", Jackson, MS, July 2022
- 12) Invited Speaker, Burrell College, "The control of renal inflammation in autoimmune-induced hypertension and renal disease", Las Cruces, NM, July 2022
- 13) Invited Speaker, UTHSCSA, Department of Cellular and Integrative Physiology "The control of renal inflammation in autoimmune-induced hypertension and renal disease", San Antonio, TX May 2022 (virtual seminar)
- 14) Invited Speaker, Navigating and Overcoming Rejections, Experimental Biology, Philadelphia, PA, April 2022
- 15) Invited Speaker, Emory University Department of Medicine Renal Division, January 2022
- 16) Invited Speaker, John Hopkins School of Medicine "The control of renal inflammation in autoimmune-induced hypertension and renal disease", Baltimore, MD, January 2022
- 17) Invited Speaker, LSUHSC Post-baccalaureate Research Education Program (PREP) Brown Bag Lunch, New Orleans, LA, January 2021 and October 2021 (virtual)
- 18) Invited Speaker, Baylor College of Medicine "The control of renal inflammation in autoimmune-induced hypertension and renal disease", Houston, TX, October 2021 (virtual)
- 19) Invited Speaker, "Neuro-immune Communication in Hypertension and Renal Disease," UNT (main campus), Department of Biomedical Engineering, Denton, TX, Fall 2020 (virtual)
- 20) Invited Virtual Speaker, the HOT Summer Seminar Series 2020, LSUHSC Department of Physiology, New Orleans, LA, July 2020.
- 21) Invited Speaker, ASPET/APS Joint Presidential Symposium Series, "Autoimmunity, Inflammation and Hypertension", Experimental Biology, April 2020. (Cancelled due to COVID-19)

- 22) Invited Chair/Moderator, APS/ASN Basic Research Forum for Emerging Kidney, Washington, DC, November 2019. (Cancelled due to family emergency)
- 23) Invited Speaker, "Dissecting Neuroimmune Mechanisms that Regulate Chronic Renal Inflammation", University of Nebraska Medical Center Department of Cellular and Integrative Physiology, Omaha, NE, November 2019.
- 24) Invited Speaker, "Sex Differences in the Development of Autoimmune-Associated Hypertension" Council on Hypertension, New Orleans, LA, September 2019.
- 25) Invited Speaker, "Disruption of Splenic Nerve-to-Spleen Neurotransmission Worsens Disease Outcome in a Murine Model of Systemic Lupus Erythematosus", Experimental Biology, Orlando, FL, April 2019.
- 26) Invited Speaker, "Neuroimmune Mechanisms Involved in Autoimmune-Induced Hypertension and Renal Injury." LSUHSC Department of Physiology, December 2018.
- 27) Invited Speaker, Neuroimmune Pathways Affecting Hypertension in Autoimmune Diseases, Getting on the Nerves: Mechanisms of Hypertension, American Society of Nephrology, San Diego, October, 2018 (Declined due to maternity leave)
- 28) Invited Speaker, "Effects of vagus nerve stimulation in a murine model of systemic lupus erythematosus." APS Water and Electrolyte Homeostasis Data Diuresis, April 2018.
- 29) Invited Speaker, "Broken Neuro-Immune Communication Exacerbates Autoimmune-Induced Hypertension and Renal Injury." Carl V. Gisolfi Seminar Series, Department of Health and Human Physiology, University of Iowa, September 2017.
- 30) Invited Speaker, "Nerve-to-spleen pathway is critical in the development of hypertension in the setting of chronic inflammatory disease." FASEB Summer Research Conference, Saxtons River, VT, July 2016.
- 31) Invited Speaker, "Neuroimmune pathway critical in the development of hypertension." Experimental Biology, NCAR Section of the American Physiological Society Featured Topic: Neural Control of Inflammation-Mediated Hypertension, San Diego, CA 2016.
- 32) Invited Speaker, "Stimulation of a neuroimmune pathway protects from hypertension". Featured Topic: Physiology and Pathophysiology. Sponsored by the American Physiological Society Water and Electrolyte Section. San Diego, CA, April 2014.
- 33) Invited Speaker, "Role of the immune system in the pathogenesis of hypertension". Department of Pharmacology, Tulane University, New Orleans, LA, January 2014.
- 34) Invited Speaker, "Mechanisms of hypertension: Role of the immune system". Department of Physiology, LSU Health Sciences Center, New Orleans, LA, September 2013.
- 35) Invited Speaker, "Activation of the cholinergic anti-inflammatory pathway prevents the development of hypertension and renal injury during chronic inflammatory disease." International Society of Hypertension (ISH): 3rd ISH New Investigators' Symposium. New Orleans, LA, September 2013.
- 36) Invited Speaker, "Mechanisms of hypertension in a mouse model of systemic lupus erythematosus." Department of Integrative Physiology, University of North Texas Health Sciences Center, Fort Worth, TX, September 2013.
- 37) Invited Speaker, "Mechanisms of hypertension in a mouse model of systemic lupus erythematosus." Department of Physiology, University of South Alabama, Mobile, AL, July 2013.
- 38) Invited Speaker, "Humoral immune system activation promotes the development of hypertension." Featured Topic: Mechanisms of Hypertension. Sponsored by the American Physiological Society Water and Electrolyte Section. Boston, MA, April 2013.
- 39) Invited Speaker, "Mechanisms of hypertension in a mouse model of systemic lupus erythematosus". William Carey University College of Medicine, Hattiesburg, MS, January 2013.
- 40) Invited Speaker, "Autoimmunity and hypertension". Young Investigator Symposium (American Society of Nephrology). Sponsored by the American Heart Association-Council on the Kidney in Cardiovascular Disease (KCVD). San Diego, CA, October 2012.
- 41) Invited Speaker, "T lymphocytes promote autoimmune-associated hypertension". Featured Topic: Immune Cells. Sponsored by the American Physiological Society Water and Electrolyte Section. San Diego, CA, April 2012.
- 42) Invited Speaker, "Renal nerves contribute to renal injury, but not hypertension, during chronic inflammation." Featured Topic: Renal Nerves and Their Role in Cardiovascular Disease. Sponsored by American Physiological Society Neural Control and Autonomic Regulation Section. Washington, DC, April 2011.
- 43) Invited Speaker, "Acetylcholinesterase inhibitor improves counterregulation and survival from severe blood loss during acute alcohol intoxication." Gordis Finalist Oral Competition, Research Society on Alcoholism, San Diego, CA, June 2009.
- 44) Invited Speaker, "Central manipulation of the sympathetic nervous system during hemorrhagic shock in the alcohol-intoxicated host." NIAAA Trainee Workshop, Indianapolis, IN, September 2007.
- 45) Invited Speaker, "Alcohol-induced hemodynamic instability during hemorrhagic shock is reversed by acetylcholinesterase inhibitor". Research Society on Alcoholism Satellite Meeting, Washington, DC, June 2007.

- 46) Invited Speaker, "Central choline-mediated sympathetic outflow does not attenuate the hypotensive response to blood loss in acute alcohol-intoxicated rodents." Alcohol and Trauma 2007, Shock Society Satellite Meeting, Baltimore, MD, June 2007.
- 47) Presenter, 21st Annual College of Science Symposium, Southern University, Baton Rouge, LA, March 2007.
- 48) Invited Speaker, "Short-term moderate alcohol intoxication impairs hemodynamic and immune response to hemorrhagic shock." Alcohol and Immunology Research Interest Group, Toronto, Canada, October, 2004.

LOCAL

- 1) Invited Speaker, "Neuroimmune control of renal inflammation in hypertension and lupus", Department of Physiology, UTSW, October 2023.
- 2) Invited Speaker (virtual), "Why Am I Here: Career Paths in Biomedical Sciences", Harmony Science Academy – Carrollton, TX, March 2023.
- 3) Invited Speaker, UNTHSC Black Pharmacy Association, "Navigating and Overcoming Rejection in Academia", January 2023.
- 4) Invited Speaker, UNTHSC Summer Research Internship Programs, Summer 2015-2019, 2021-2022.
- 5) Invited Speaker, UNTHSC Department of Pharmacology and Neuroscience, April 2021.
- 6) Invited Speaker, Women's Brain and Cardiovascular Health Conference, Department of Physiology and Anatomy, UNTHSC, January, 2020.
- 7) Invited Speaker, "Novel Neuroimmune Interactions Regulate Inflammation in Autoimmune-Induced Hypertension." UNTHSC Microbiology, Immunology and Genetics, November 2017.
- 8) Invited Speaker, "Academic Biomedical Research", UNTHSC Camp Cardiac, July 2017.
- 9) Invited Speaker, "Navigating a Career in Science and Academia", SACNAS at UNTHSC, March 2015.
- 10) Invited Speaker, Role Model Speaker for Summer Undergraduates, UNTHSC Center for Diversity and International Programs, July 2014.
- 11) Speaker, UMMC/Mississippi Valley State University Mini Med School: UMMC Research Lab Experience, Jackson, MS, May 2014.
- 12) Invited Speaker, "Hypertension in mice with the chronic inflammatory disease systemic lupus erythematosus is not salt-sensitive." 2011 APS Conference: Physiology of Cardiovascular Diseases: Gender Disparities. Jackson, MS, October 2011.
- 13) Invited Speaker, "Acute alcohol intoxication impairs counterregulatory responses during hemorrhagic shock," Graduate Research Day, LSU Health Sciences Center, April 2007.

PANELS AND OTHER PRESENTATIONS

- 1) Panel Guest, UNTHSC Early Career Development Council Promotion and Tenure Workshop, May 2022.
- 2) Table Discussion Leader, "Work-Life Balance", The American Physiological Society Minority Travel Fellows Networking Breakfast, Philadelphia, PA, April 2022
- 3) Panel Guest, Basic Research Forum for Emerging Kidney Scientists (associated with American Society of Nephrology), November 2021 (virtual)
- 4) Panel Guest, AHA Supporting Undergraduate Research Experiences (SURE) Program, Stanford, Palo Alto, CA, July 2021 (virtual)
- 5) Invited Video, "A Picture is Worth a 1000 Words: Using Instagram to Boost Your Science", Career Central, Experimental Biology, Spring 2021
- 6) Panel Guest, FWMD Live: The Heart of Communicating Science, TCU/UNTHSC Facebook Live (AAMC-awarded), March 2021
- 7) Featured Speaker, AHA Enhance Research Communications Video and Module, Fall 2020
- 8) Panel Guest, Fireside Chat on Mentoring Relationships, The Basic Research Forum for Emerging Kidney Scientists, American Society of Nephrology (ASN), October 2020
- 9) Table Discussion Leader, "Interviewing Skills", The American Physiological Society Minority Travel Fellows Networking Breakfast, March 2015
- 10) Discussion Leader, "Networking in Physiology", ABRCMS (San Antonio), November 2014
- 11) Panel Guest, "Insights as an American Heart Association Reviewer", UMMC Department of Physiology, Jackson, MS, April 2014
- 12) Panel Guest, Graduate School Informational on "Applying and Interviewing for Faculty Positions", UMMC School for Graduate Studies in the Health Sciences/Office for Postdoctoral Studies, Jackson, MS, April 2014
- 13) Mechanisms of hypertension: Role of the immune system. Department of Pharmacology and Toxicology, University of Mississippi Medical Center, Jackson, MS, September 2013
- 14) Neuro-immune interactions in the development of hypertension and renal injury. Department of Physiology and Biophysics, University of Mississippi Medical Center, Jackson, MS, November 2013

- 15) Mechanisms of hypertension in a mouse model of systemic lupus erythematosus. Department of Physiology and Biophysics, University of Mississippi Medical Center, Jackson, MS, December 2012.
- 16) Is there a role for renal sympathetic nerves in hypertension and renal injury during chronic inflammatory disease? Department of Physiology and Biophysics, University of Mississippi Medical Center, Jackson, MS, February 2011.
- 17) Panel Guest, American Physiological Society Experimental Biology High School Teacher/Student Workshop, New Orleans, LA, April 2009.
- 18) Central targets for improved counter-regulation to hemorrhage during acute alcohol intoxication. Final Dissertation Exam, Department of Physiology, LSUHSC, New Orleans, LA, April 2009.
- 19) Physiologist-in-Residence, American Physiological Society Science Teacher Forum, Warrenton, VA, July 2008.
- 20) Determining mechanisms involved in impaired counter-regulatory responses to hemorrhagic shock during alcohol-intoxication. Oral Preliminary Exam, Department of Physiology, LSUHSC, New Orleans, LA, June 2008.
- 21) Panel Guest, LSUHSC Information & Recruitment Session, Southern University Baton Rouge, March 2008.
- 22) The physiology of obstructive sleep apnea. Oral Qualifying Exam, Department of Physiology, LSUHSC, New Orleans, LA, October 2006.
- 23) Panel Guest, Graduate School Informational, Black Graduate and Professional Student Association, LSU, Baton Rouge, LA, November 2005.
- 24) Impact of alcohol on the response to hemorrhagic shock: Differential effects of dose and duration of intoxication. Thesis Defense, Alcohol Research Center, LSUHSC, New Orleans, LA, May 2005.
- 25) Alcohol and trauma. Department of Physiology, LSUHSC, New Orleans, LA, November 2004.

COMMUNITY SPEAKING ENGAGEMENTS

- 1) Career Day, June W. Davis Elementary School, May 2022
- 2) Career Day, Texas Elementary School of Arts, Edgecliff, TX, April 2019
- 3) Career Day, OD Wyatt High School, Fort Worth, TX, March 2019
- 4) Career Day, Dallas Park Elementary School, Fort Worth, TX, March 2019
- 5) Career Day, Dallas Park Elementary School, Fort Worth, TX, February 2018

MENTORING EXPERIENCE

MATHIS LABORATORY TRAINEES

<u>Trainee/Degrees (at matriculation)</u>	<u>Type</u>	<u>Years</u>	<u>Awards/Honors (while matriculating)</u>
Caroline Shimouda Gusson Lima, PhD	Postdoc	2019-2022	Review Editor, Frontiers Auton Neuro (2020) Moderated Poster Council on Htn (2021)
Sarika Chaudhari, MD/PhD <i>*Presently Mathis Lab Manager*</i>	Postdoc	2017, 2022-Present	Invited Speaker EB Featured Topic (2022)
Grace Pham, MS <i>*Presently Psychiatry Resident at Baylor*</i>	DO/PhD Student	2015-2020	Dissertation with Distinction (2020) EB Featured Topic Co-Chair (2019) RAD Phys Poster 3rd place (2018) RAD TCOM SGA Best in 2nd year (2017) RAD TCOM Research 2nd place (2017) RAD ICMD Oral 3rd place (2017) APS Graduate Student Ambassador (2017) APS Caroline tum Suden (2016) AHA Predoc Fellowship (2016)
Viet Dinh	PhD Student	2020-2022	MS (2022) RAD SBS Oral 1 st place (2022) Yurio Scholarship (2022) 3 rd place Trainee 3MT Competition (2021) Council on Hypertension Travel Award (2022) Student Association of Biomedical Sciences Travel Award (2022) UMMC CardioRenal Research Center Symposium Travel Award (2022)
Rusty Hartman (Class of 2021)	MS Student	2019-2021	Thesis (2021)

Dennis Kulp, MS (Class of 2022)	DO Student	2017-2021	RAD TCOM Best in First-Year Class (2017) RAD TCOM Best in Fourth Year (2021)
Shyam Vedantam (Class of 2020)	DO Student	2017	TCOM Research Practicum Honors (2017)
Maitryben Patel (Class of 2018)	DO Student	2015	--
Charles Malloy (Class of 2018)	DO Student	2015-2018	TCOM Research Practicum Honors (2015) 4 th Year Research Rotation (2018)
Keanna Johnson	PDRT	2022-2023	--
Bradley D'Souza <i>*Presently Medical Student at Incarnate Word*</i>	Med Science MS	2019-2020	Practicum with Distinction (2020)
Luke D'Cunha	Med Science MS	2016-2017	SAME Scholarship (2017)
Orlexia Thomas (pre-med)	Volunteer	2017	--
Sulaimon Ade Bakre, MD (pre-residency)	Volunteer	2017	--
Tanya Michaels, MS (pre-med)	Volunteer	2016	--
Karlie Johnson (Alcorn)	DURA	2022	--
Brandon Lovelace (Southern)	SMART	2022	--
Karlie Johnson (Alcorn)	SMART	2021	--
Naima Batson (Howard)	SMART	2019	Outstanding Poster Presentation (2019)
Jeremy Williams (Xavier)	SMART	2018	--
Billy Osazuwa (Texas Southern)	SMART	2017	--
Courtney Day (Uof Southern Miss)	SMART	2016	--
Eduvie Ojegba (Tuskegee)	SMART	2015	--
Cassandra Young Stubbs	Lab Technician	2018-Present	--
Jessica Morales, MS	Lab Technician	2018-2020	--
Daniel Fancher	Lab Technician	2016-2017	--
Amber Fairley	Lab Technician	2015-2016	--
Calvin Brooks	PhD Rotation	2020-2022	Qualifying Exam w/Distinction (2021) NIH T32 Fellow (2021)
William Mayhem	PhD Rotation	2019	--
Yu Tao	PhD Rotation	2019	--
Emily Williams, MS	PhD Rotation	2018-2019	--
Suhhyun "Sarah" Kim	DO/PhD Rotation	2017-2018	--
Bronte Gonzales	MS Rotation	2015	--

OTHERS

2020

Junior Faculty Mentoring Team

UNT Health Science Center, Fort Worth

Mentees: Mark Cunningham, PhD

2016

National Research Mentoring Network (NRMN):

UNT Health Science Center, Fort Worth

Mentees: Fanni Manny

2014-Present

Dissertation/Thesis Committee:

UNT Health Science Center, Fort Worth, TX

MS Students:

Oluwaseun Omoba (Medical Science Research Track (MSRT); Class of 2022)

Christopher Pagano (MRST; Class of 2018)

Frances Proctor (University Member; Class of 2016)

PhD Students:

Jonna Smith (Committee Member, TBD)

Yu Tao (Committee Member; TBD)

Elliott Allums (University Member; withdrew)

Renuka Chaphalker (University Member; Class of 2021)

Steve Mabry (University Member; TBD)

Clinical Research Management Students:

Chad Elliot (Major Professor; withdrew)
 Austin Wong (Major Professor; withdrew)
 Eva Patel (Committee Member; Class of 2020)

UNT Main Campus, Denton, TX

PhD Students:

Kayla Nguyen (Committee Member, TBD)

- 2013-Present **Experimental Biology Conference Mentor:**
American Physiological Society
Minority Travel Fellows: Cindy Franklin (Incarnate Word), Gilbert Morales (UNTHSC)
WEH Mentoring-on-the Go: Jenna Peterson (U of Minnesota-Duluth), Jess Ivy (U of Edinburgh, UK),
 Carmen de Miguel (U of Alabama-Birmingham)
APS Inflammation Conference: Ijeoma Obi (U of Alabama-Birmingham)
- 2009-2014 **Co-Mentoring-Ryan Laboratory:**
University of Mississippi Medical Center, Jackson, MS
Undergraduate Students: Khushkanwardeep Aujla, Nicholas Stewart, Taylor Coleman, Warren Masterson, Katie Wasson
Graduate Student: Emily Gilbert
- 2006-2009 **Co-Mentoring-Molina Laboratory:**
LSU Health Sciences Center, New Orleans, LA
Medical Students: Jeremy Daigle, O'Keith Dellafosse
Undergraduate Students: Ciera Singleton, Rachael Rider, Tiffany Best, Ze Zhang

TEACHING EXPERIENCE

UNTHSC

**Bold italics denotes course leadership in teaching (course director or co-director)*

Course ID	Course	Section	Hours	Semester/Year
<i>JAMP</i>	<i>Physiology and Anatomy Course</i>	<i>Endocrine Phys</i>	<i>14</i>	<i>Summer 2023</i>
BMSC 6998	Individual Research	N/A	--	Summer 2023
<i>BMSC 5109</i>	<i>DEI Course</i>	<i>DEI</i>	<i>10</i>	<i>Spring 2023</i>
BMSC 5304	Medical Science	Gastrointestinal/Endocrine Phys	20	Spring 2023
PHAN 6400	Physiology in Health and Disease	Endocrine Phys	10	Spring 2023
PHAN 5302	Renal-Respiratory Advanced Phys	Renal Inflammation and Htn	3	Spring 2023
BMSC 6998	Individual Research	N/A	--	Spring 2023
<i>MPAS 5512</i>	<i>Human Physiology for PAs</i>	<i>Gastrointestinal Phys</i>	<i>8</i>	<i>Fall 2022</i>
PHAN 6385	Student Works in Progress	N/A	5-10	Fall 2022
BMSC 6998	Individual Research	N/A	--	Fall 2022
BMSC 5150	Laboratory Rotations	N/A	--	Fall 2022
<i>JAMP</i>	<i>Physiology and Anatomy Course</i>	<i>Endocrine Phys</i>	<i>14</i>	<i>Summer 2022</i>
BMSC 6998	Individual Research	N/A	--	Summer 2022
<i>BMSC 5109</i>	<i>DEI Course</i>	<i>DEI</i>	<i>10</i>	<i>Spring 2022</i>
BMSC 5304	Medical Science	Gastrointestinal/Endocrine Phys	20	Spring 2022
PHAN 6400	Physiology in Health and Disease	Endocrine Phys	10	Spring 2022
PHAN 5302	Renal-Respiratory Advanced Phys	Renal Inflammation and Htn	3	Spring 2022
BMSC 6998	Individual Research	N/A	--	Spring 2022
<i>MPAS 5512</i>	<i>Human Physiology for PAs</i>	<i>Gastrointestinal Phys</i>	<i>6</i>	<i>Fall 2021</i>
PHAN 6385	Student Works in Progress	N/A	5-10	Fall 2021
BMSC 6998	Individual Research	N/A	--	Fall 2021
BMSC 5150	Laboratory Rotations	N/A	--	Fall 2021

JAMP BMSC 6998	Physiology and Anatomy Course Individual Research	Cardiovascular Phys N/A	30 --	Summer 2021 Summer 2021
BMSC 5304	Medical Science	Gastrointestinal/Endocrine Phys	18	Spring 2021
PHAN 6400	Physiology in Health and Disease	Endocrine Phys	5	Spring 2021
PHAN 6385	Student Works in Progress	N/A	5-10	Spring 2021
PHAN 5302	Renal-Respiratory Advanced Phys	Renal Inflammation and Htn	3	Spring 2021
BMSC 6998	Individual Research	N/A	--	Spring 2021
MPAS 5512	Human Physiology for PAs	Gastrointestinal Phys	6	Fall 2020
PHAN 6385	Student Works in Progress	N/A	5-10	Fall 2020
BMSC 6998	Individual Research	N/A	--	Fall 2020
BMSC 5150	Laboratory Rotations	N/A	--	Fall 2020
JAMP BMSC 6998	Physiology and Anatomy Course Individual Research	Cardiovascular Phys N/A	30 --	Summer 2020 Summer 2020
PHAN 6400	Physiology in Health and Disease	Endocrine/Reproductive Phys	8	Spring 2020
PHAN 6385	Student Works in Progress	N/A	5-10	Spring 2020
BMSC 6998	Individual Research	N/A	--	Spring 2020
MPAS 5612	Human Physiology for PAs	Signal Transduction/Endo/Repro	12	Fall 2019
PHAN 6385	Student Works in Progress	N/A	5-10	Fall 2019
BMSC 5150	Laboratory Rotations	N/A	--	Fall 2019
BMSC 6998	Individual Research	N/A	--	Fall 2019
BMSC 6998	Individual Research	N/A	--	Summer 2019
BMSC 5150	Topics in Biomedical Sciences	N/A	2	Summer 2019
BMSC 6391	Physiology in Health and Disease	Endo/Repro	6	Spring 2019
PHAN 6385	Student Works in Progress	N/A	5-10	Spring 2019
BMSC 6998	Individual Research	N/A	--	Spring 2019
MPAS 5612	Human Physiology for PAs	Sig Trans/Endo/Repro	12	Fall 2018
PHAN 6385	Student Works in Progress	N/A	5-10	Fall 2018
BMSC 6998	Individual Research	N/A	--	Fall 2018
BMSC 6998	Individual Research	N/A	--	Summer 2018
BMSC 5150	Topics in Biomedical Sciences	N/A	2	Summer 2018
PHAN 6385	Student Works in Progress	N/A	5-10	Spring 2018
BMSC 6998	Individual Research	N/A	--	Spring 2018
MPAS 5612	Human Physiology for PAs	Sig Trans/Endo/Repro	12	Fall 2017
PHAN 6385	Student Works in Progress	N/A	5-10	Fall 2017
BMSC 6998	Individual Research	N/A	--	Fall 2017
BMSC 5150	Laboratory Rotations	N/A	--	Fall 2017
BMSC 5150	Topics in Biomedical Sciences	N/A	2	Summer 2017
BMSC 6998	Individual Research	N/A	--	Summer 2017
BMSC 6998	Individual Research	N/A	--	Spring 2017
MPAS 5612	Human Physiology for PAs	Sig Trans/Endo/Repro	12	Fall 2016
BMSC 6998	Individual Research	N/A	--	Fall 2016
BMSC 6998	Individual Research	N/A	--	Summer 2016
BMSC 5150	Topics in Biomedical Sciences	N/A	2	Summer 2016
BMSC 6998	Individual Research	N/A	--	Spring 2016
MPAS 5612	Human Physiology for PAs	Sig Trans/Endo/Repro	12	Fall 2015
BMSC 6998	Individual Research	N/A	--	Fall 2015

PHAN 5140	Seminar in Current Topics in Phys	N/A	5-10	Fall 2015
BMSC 5150	Topics in Biomedical Sciences	N/A	2	Summer 2015
BMSC 5150	Laboratory Rotations	N/A	--	Spring 2015
PHAN 5140	Seminar in Current Topics in Phys	N/A	5-10	Spring 2015
PHAN 5140	Seminar in Current Topics in Phys	N/A	5-10	Fall 2014
BMSC 5135	Intro to Faculty Res Programs	N/A	1	Fall 2014

OTHER TEACHING EXPERIENCE

<u>Course</u>	<u>Location</u>	<u>Section</u>	<u>Hours</u>	<u>Semester/Year</u>
Nursing Pathophysiology	LSU Health Sciences Center	Endocrine	3	Spring 2008
Dental Hygiene Physiology	LSU Health Sciences Center	Respiratory	2	Spring 2009 Spring 2008 Spring 2007
Medical Physiology Tutor <i>*After hours tutoring in both formal/structured (≤ 10 students) and relaxed (one-on-one) sessions</i>	LSU Health Sciences Center	General Phys	--	Spring 2007- Fall 2008
Nursing Physiology Teaching Assistant and Tutor <i>*After hours large formal teaching sessions (≤ 60 students) where we reviewed material discussed in class in a lecture-style format. In addition, conducted/lead weekly laboratory experiments</i>	LSU Health Sciences Center	General Phys	--	Fall 2004-Spring 2009
General Physics Laboratory I & II <i>*Conducted lab for 2 hours, twice a week for 2 consecutive years (4 semesters). This teaching experience required careful introduction and explanation of the material and lab experiment, monitoring of students during experiments, maintenance of office hours, and lab report grading</i>	Purdue University	General Physics	--	Fall 2001-Fall 2003
General Physics Recitation <i>*Conducted recitation once a week for 1 hour for 2 consecutive years (4 semesters). Recitation required reviewing homework assignments, exam proctoring, and some tutoring during office hours.</i>	Purdue University	General Physics	--	Fall 2001-Fall 2003

PEER REVIEW

JOURNAL LEADERSHIP

2023-	Editorial Board, Frontiers in Lupus
2022-2024	Editorial Board, Hypertension
2022-2023	Review Editor, Journal of Physiology (07/01/22-01/30/23-delayed)
2021-	Consulting Editor, AJP-Heart and Circulatory Physiology
2020-	Associate Editor, American Journal of Physiology (AJP)-Regulatory, Integrative and Comparative Physiology
2020-	Review Editor, Frontiers in Autonomic Neuroscience
2019-	Guest Editor, Frontiers in Medicine – Nephrology

JOURNAL AD-HOC REVIEWER

2023-	Nature Reviews Nephrology
2022-	BMJ Open
2022-	GeroSciences
2021-	Frontiers in Physiology
2020-	Frontiers in Pharmacology
2020-	Frontiers in Immunology
2020-	AJP-Renal
2019-	AJP: Heart
2019-	Pharmacological Research

2019- Ethnicity and Disease
 2018- Scientific Reports
 2017- AJP-Regulatory
 2017- Molecular Medicine Reports
 2017- Oxidative Medicine and Cellular Longevity
 2017- Journal of Dermatology and Clinical Research
 2016- BMC Nephrology
 2016- Journal of Immunology and Infectious Diseases
 2016- Circulation Research
 2016- Clinical Science
 2014- Microcirculation
 2014- Hypertension
 2013- APS Education Advances in Review
 2013- Antioxidants
 2010- Journal of Hypertension

STUDY SECTION-GRANT REVIEW

2023 Co-Chair, Lupus Research Alliance Career Development Award and Postdoctoral Awards
 2023 NIH Innovative Science Accelerator Program
 2022-2028 Standing Member, Pathobiology of Kidney Disease (PBKD) Study Section, Center for Scientific Review, National Institutes of Health (NIH)
 2022 Lupus Research Alliance-Lupus Mechanisms and Targets Award and Lupus Innovation Award (Letters of Intent Only)
 2022 Lupus Research Alliance Career Development Award (February)
 2021 AHA Cardiac Biology Sciences Fellowship Study Section (November)
 2021 NIH-Center for Scientific Review Pathobiology of Kidney Disease Study Section (October)
 2021 Lupus Research Alliance-Lupus Innovation Award (Letters of Intent Only)
 2021 NIH-Center for Scientific Review Pathobiology of Kidney Disease Study Section (June)
 2020 NIH-Center for Scientific Review Pathobiology of Kidney Disease Study Section (October)
 2020 American Heart Association- TPA Basic Cardiac Sciences 1
 2019 American Heart Association-Cardiac Biology/Regulation Career/Fellowships
 2018 UNTHSC Institutional Seed Grants
 2018 American Heart Association- Career Development Award Basic Cardiac Sciences 1
 2017-2018 UNTHSC Texas Center for Health Disparities Steps Toward Academic Research (STAR) Fellowship
 2016-2017 American Heart Association-Cardiac Biology/Regulation BSc5
 2015 American Heart Association-Vascular Sciences BSc3
 2014 American Heart Association-Cardiac Biology/Regulation BSc7

ABSTRACT AND AWARD REVIEW COMMITTEES

2023 DoD SMART Scholarship-for-Service Program Scholarship
 2021- APS Porter Physiology Fellowship
 2021- APS Martin Frank Travel Award
 2022 Basic Research Forum for Emerging Kidney Scientists
 2021 APS NCAR Section Awards
 2016-2018 APS Dean Franklin Award
 2016-2018 APS Shih Chun Award
 2015 APS Undergraduate Research Excellence Fellowship (UGREF)
 2015 APS Undergraduate Summer Research Fellowship (UGSRF)
 2014 APS Minority Travel Fellowship
 2014 APS Integrative Organismal Systems Physiology (IOSP) Undergraduate Research Fellowship Program
 2014 APS Short-Term Research Education Program to Increase Diversity in Health-Related Research (STRIDE) Undergraduate Research Fellowship Program
 2013-2018 APS Minority K-12 Outreach Fellow
 2012-2014 APS Porter Physiology Fellowship

SERVICE AND EXTRACURRICULAR ACTIVITIES

LEADERSHIP

01/23-	Chair, Awardee Engagement Program Oversight Advisory Committee, <i>AHA National</i> (national)
01/22-09/22	Chair, UNTHSC SBS Diversity, Equity and Inclusion (DEI) Committee (local)
2021	Executive Director, <i>Black in Physiology, Inc</i> (national)
2020	Chair, GSBS DEI Working Group Seminar Series, <i>UNTHSC</i> (local)
08/2020	Co-Founder of Black in Physiology (national)
07/20-06/22	Chair, Membership and Communications Committee, <i>AHA Council on Hypertension</i> (national)
2020	Alternate Council, <i>Texas Joint Admissions Medical Program (JAMP)</i>

UNTHSC COMMITTEES

2023	Member, Faculty Achievement Award Committee
2022	Member, Student Conduct Committee
2022	Member, Physiology and Anatomy Faculty Search Committee
2020-2021	Member, Pharmacology and Neuroscience Small Animal Imaging Search Committee
2020	Member, GSBS Admissions Committee
2020-	Member, GSBS DEI Committee
2020	Member, Physiology and Anatomy Faculty Search Committee
2020-	Alternate Council, JAMP
2018-2022	IACUC Committee Alternate Member
2018-	Advisory Member, Initiative for Maximizing Student Development (IMSD) Internal Advisory Committee, <i>Texas Center for Health Disparities</i>
2017-2018	Member, GSBS Executive Committee (w/Interim Dean, Dr. He)
2016	Member, Health Institutes Faculty Mentor Working Group (w/Dr. Dillon)
2016-	Co-Chair, Department Communications Committee, <i>Department of Physiology and Anatomy</i>

AMERICAN PHYSIOLOGICAL SOCIETY (APS) COMMITTEES

2022-	Water and Electrolyte Homeostasis Section Secretary/Treasurer Elect, <i>APS</i>
2021	The APS New Product Development (NPD) Insights Panel, <i>APS</i>
07/21-06/24	Member, Diversity, Equity and Inclusion Committee, <i>APS</i>
06/19-	Communications and Newsletter Chair, Sex and Gender Research Interest Group (SGRIG) Steering Committee, <i>APS</i>
2017	Honorary 50 th Anniversary of the Porter Physiology Committee, <i>APS</i>
2016-2018	Awards Committee Member, <i>APS</i>
2016-2018	Steering Committee, Science Policy and Communication Liaison, <i>NCAR Section of the APS</i>
2012-2014	Porter Physiology Development Committee, <i>APS</i>

AMERICAN HEART ASSOCIATION (AHA) COMMITTEES

07/23-06/25	Nominating Committee, <i>AHA Council on Hypertension</i>
07/22-06/23	Immediate Past Chair, Membership Committee, <i>AHA Council on Hypertension</i>
06/21-06/22	Nominating Committee, Council on the Kidney in Cardiovascular Disease (KCVD) Leadership Committee, <i>AHA KCVD</i>
07/19-06/22	Member, Research Peer Review Subcommittee, <i>AHA National</i>
03/19-02/21	Member, Research Committee Task Force on Enhancing Research Communications, <i>AHA National</i>
07/18-06/22	Member, National Research Committee, <i>AHA National</i>
07/18-06/22	Diversity Champion, KCVD Leadership Committee, <i>AHA KCVD</i>
07/18-06/20	Vice Chair, Membership and Communications Committee, <i>AHA Council on Hypertension</i>
12/17-06/22	Member, Hypertension Leadership Committee, <i>AHA Council on Hypertension</i>
2014-2018	Early Career Committee Commission, <i>AHA KCVD</i>

OTHER NATIONAL COMMITTEES

05/23-	Kidney Week Education Committee 2024-2025, <i>American Society of Nephrology</i>
07/22-06/23	Advanced Placement Anatomy and Physiology Advisory Board, <i>College Board</i>
4/2021	Co-Chair, Programming Committee, Conference for Black Physiologists, <i>Black in Physiology</i>
07/19-05/21	Member, Advisory Committee to the Director (ACD) Working Group on Enhancing Reproducibility and Rigor in Animal Research, <i>NIH</i>

INTERNATIONAL COMMITTEES

2017 Planning Committee, International Early Career Symposium, *Brazil International Union of the Physiological Sciences (IUPS)*

CONFERENCES/SESSIONS ORGANIZED

2021-2023 Conference for Black Physiologists (C4BP), Black in Physiology
2022 Proposal Writer and Co-Chair, *EB Featured Topic (WEH): Diseases that Impact the Black Community: This is Our Why*
2019 Proposal Writer and Chair, *EB Featured Topic (NCAR): Autonomic Anti-inflammatory Mechanisms: Which Branch Trumps?*
2018 Co-Chair, *Experimental Biology Featured Topic: NCAR Hot Topics*

OUTREACH

2022 June W. Davis Career Fair, *Crowley ISD, Fort Worth, TX*
2022 PhUn15 - Physiology Understanding (PhUn) in 15 minutes or less! K-12 Outreach Video, *The Mathis Laboratory* (<https://www.youtube.com/watch?v=bHy6uMX1xak>)
2019-Present Physiology Understanding (PhUn) Tours, *Texas Center for Arts + Academics Schools: Texas Elementary School of Arts, Fort Worth Academy of Fine Arts; Fort Worth ISD Schools: William James Middle School, OD Wyatt High School; Crowley ISD Schools: Dallas Park Elementary, June W. Davis; Irving ISD*
2017-2018 Insider Experience Tours, *UNTHSC*
2015-Present UNTHSC Lab Tours, *Students from Dublin HS (2015), Arlington ISD (2015, 2019); Garland HS (2017-2018); Mentors for Life (2015-2017)*
2015 Vestido Rojo Exhibit, *Fort Worth American Heart Association*
2008-2018 PhUn Week, *American Physiological Society*
2003-2008 Volunteer, *LSU Health Sciences Center/New Orleans Public School Science Partnership*

OTHER PROFESSIONAL SERVICE ACTIVITIES

2021 Judge, *Women's Brain and Cardiovascular Health Conference*
2019 Moderator, *Regulation of Blood Pressure by the Central Nervous System, Council on Hypertension*
2017 Moderator, *Inflammation, Immunity and Cytokines, Council on Hypertension*
2016 Moderator, *Immune Mechanisms of Hypertension, Council on Hypertension*
2016-Present Interviewer, *Medical Science Masters Students (mock interviews for medical school), UNTHSC*
2015 Moderator, *Experimental Biology Featured Topic: CNS Mechanisms of Blood Pressure Regulation, American Physiological Society*
2014-2016 Interviewer, *Texas College of Osteopathic Medicine (entering students), UNT Health Science Center*
2012 Moderator, *Experimental Biology Featured Topic: Immune Cells, American Physiological Society*
2011 Moderator, *Gulf Coast Physiology Annual Meeting Oral Session, Jackson, MS*
2011 Postdoctoral Journal Club Co-Chair, *University of Mississippi Medical Center, Jackson, MS*
2009-2015 David Bruce Award Judge, *American Physiological Society (2009, 2011, and 2013; 2015 group leader)*

COMMUNITY SERVICE

2015-2016 Southern University Alumni Federation-Dallas-Fort Worth, *Scholarship Committee*
2012 Science Fair Judge, *Northwest Rankin Elementary School, Flowood, MS*
2011 Science Fair Judge, *Timberlawn Elementary, Jackson, MS*
2003-2007 Yearbook Staff, *LSU Health Sciences Center*
2006-2007 Scholarship Committee, *Alpha Kappa Alpha Sorority, Incorporated, Tau Kappa Omega Chapter*
2001-2003 Historian, *Black Graduate Association, Purdue University*
2000-Present Member, *Alpha Kappa Alpha Sorority, Incorporated Society*

PROFESSIONAL DEVELOPMENT

COURSES AND WORKSHOPS

2021 National Coalition Building Institute Diversity and Inclusion Leadership Training
2020 Steps Toward Academic Research (STAR) Leadership Program Fellow, *Texas Center for Health Disparities (TCHD), UNTHSC*
2020 Fite Physiology and Anatomy Leadership Workshop
2019 Peg Atkinson Grant Writing Workshop

2019 NIH Grant Writing Study, *National Institute on Minority Health and Health Disparities (NIMHD)*
 2019-2020 Teaching Excellence Faculty Seminar Series, *Center for Innovative Learning, UNTHSC*
 2016-2017 Teaching Excellence Faculty Seminar Series, *Center for Innovative Learning, UNTHSC*
 2016 Research Leaders Academy Scholar, *American Heart Association*

CONFERENCES ATTENDED

2023- American Physiological Summit
 2021 LUPUS and CORA
 2021 NIH NHLBI K to R01 Conference (virtual)
 2020 FASEB Translational Neuroimmunology Conference: From Mechanisms to Therapeutics (virtual)
 2020- UNTHSC TCHD Health Disparities Conference (2020-2021 virtual)
 2019-2021 Lupus Research Alliance Discovery Annual Conference (2020-2021 virtual)
 2019-Present UNTHSC Department of Physiology Women’s Brain and Cardiovascular Health Conference
 2018 AHA Diversity Summit
 2016 UNTHSC Institute for Cardiovascular and Metabolic Disease Conference
 2016 FASEB Neural Mechanisms in Cardiovascular Regulation
 2016 AHA Research Leaders Academy
 2016 APS Inflammation Conference
 2015 Physiological Society
 2014 Annual Biomedical Research Conference for Minorities (ABRCMS)
 2012 American Society of Nephrology
 2011 APS Gender Conference
 2009- Council on Hypertension (2009-2014, 2016-2017, 2019, 2020-2021 (virtual), 2022)
 2006-2009 Research Society on Alcoholism
 2006-2009 Shock
 2005-2022 Experimental Biology (2005-2009, 2011-2019, 2021-2022)
 2004-2011 Gulf Coast Physiological Society (2004, 2009, 2011)

PROFESSIONAL SOCIETY MEMBERSHIPS

2023- American Society of Nephrology
 2020- Black in Physiology
 2009- American Heart Association
 2004- American Physiological Society
 2007-2009 Research Society on Alcoholism
 2007-2009 Shock Society
 2007-2009 Louisiana Academy of Sciences
 2004-2005 Society for Leukocyte Biology
 1997-2001 American Physical Society – Society of Physics Students