

Curriculum Vitae

THOMAS EUGENE SHARP III, Ph.D.

Assistant Professor, Dept. of Molecular Pharmacology and Physiology
Faculty, USF Health, Heart Institute
Morsani College of Medicine
University of South Florida

ADDRESS 560 Channelside Drive
MDD 610G
Tampa, FL 33602
Office: (813) 396-9503
Cellular: (908) 692-5626
Email: Tesharp@usf.edu

PERSONAL INFORMATION

Current Address: Safety Harbor, FL 34695
Date of Birth: 1988
Citizenship: United States of America
Marital Status: Married – Michelle
Children: RMES, LJS

EDUCATION

Doctor of Philosophy, Molecular and Cellular Physiology Temple University, Lewis Katz School of Medicine Department of Physiology, Cardiovascular Research Center Philadelphia, PA, USA	2010-2017
Bachelor of Arts, Neuroscience Drew University, College of Liberal Arts Department of Neuroscience Madison, NJ, USA	2006-2010

POSTDOCTORAL TRAINING

Postdoctoral Fellowship, Cardiovascular Pathophysiology Louisiana State University, Health Science Center – New Orleans School of Medicine, Cardiovascular Center of Excellence New Orleans, LA, USA	2017-2021
--	-----------

AWARDS AND HONORS

International Society of Heart Research World Congress Travel Award	2019
American Heart Association Postdoctoral Fellowship	2018-2020
Mary P. Wiedeman Award in Physiology, Lewis Katz School of Medicine	2017
Cover Illustration in Circulation Research (Circ Res. 2015 Nov 6)	2015
American Heart Association Predoctoral Fellowship	2014-2016

APPOINTMENTS

Academic

<u>Primary</u> Assistant Professor (tenure-track), Department of Molecular Pharmacology & Physiology, Morsani College of Medicine, USF	2023-present
Assistant Professor (tenure-track), Sec. of Cardiology, Dept. of Medicine, School of Medicine, LSUHSC – NO	2021-2023

Secondary

Faculty, USF-TGH Transplant Research Center, USF Health	2025
Faculty, Hypertension and Kidney Research Center, USF Health	2023-present
Faculty, Heart Institute, USF Health	2023-present
Faculty, Cardiovascular Center of Excellence (CVCE), LSUHSC – NO	2021-2023
Faculty, Department of Physiology, LSUHSC – NO	2021-2023

Administrative

Director, Translational Core Laboratory, CVCE, LSUHSC-NO	2022-2023
Associate Member, Faculty, School of Graduate Studies, LSUHSC – NO	2021-2023

TEACHING: LECTURER

University of South Florida

<u>Course #</u>	<u>Course Title</u>	<u>School/College</u>	<u>Students</u>	<u>Hours</u>	(S) Spring (F) Fall
BMS6633	Cardiovasc. & Pulmonary System	Medicine-UME	130	7	2024 (F)
GMS6051	Signal Transduction	Graduate	8	2	2024 (F)
GMS6543	Adv. Medical Pharm. & Physiology	Graduate	10	2	2024 (S)

LSUHSC-NO

<u>Course #</u>	<u>Course Title</u>	<u>School/College</u>	<u>Students</u>	<u>Hours</u>	
HLSC34101	Pathophysiology “CVD & HF”	Nursing		2	2023 (F)
HLSC24101	Human Physiology “Vasculature”	Nursing		2	2023 (S)
HLSC34101	Pathophysiology “CVD & HF”	Nursing		2	2023 (S)
HLSC34101	Pathophysiology “CVD & HF”	Nursing		2	2022 (F)
HLSC34101	Pathophysiology “CVD & HF”	Nursing	99	2	2022 (F)
HLSC24101	Human Physiology “Vasculature”	Nursing	171	2	2022 (F)
HLSC24101	Human Physiology “Vasculature”	Nursing	109	2	2022 (S)

TEACHING: INSTRUCTOR

University of South Florida

<u>Course #</u>	<u>Laboratory Title</u>	<u>School/College</u>	<u>Students</u>	<u>Hours</u>	
BMS6633	Spirometry Lab	Medicine-UME	8-10	1 (4x)	2024 (F)
BMS6633	Electrocardiogram Lab	Medicine-UME	8-10	1 (4x)	2024 (F)
BMS6633	Electrocardiogram Lab	Medicine-UME	8-10	1 (4x)	2023 (F)

TEACHING: SUPERVISORY

Graduate Students

University of South Florida

<u>Name</u>	<u>School/College</u>	<u>Program</u>	
Thanh Trung Van, M.S.	Medicine	Ph.D.	2023-present

Medical Students

University of South Florida

<u>Name</u>	<u>School/College</u>	<u>Funding</u>	(S) Summer
Carsten Langholm, B.S.	Medicine	R24DK134324	2025 (S)
William Hardin, B.S.	Medicine	R24DK134324	2024 (S)

LSUHSC-NO

<u>Name</u>	<u>School/College</u>	
Kashyap Koul, B.S.	Medicine	2021
Matthew Shields, B.S.	Medicine	2020

Doctoral Thesis and Dissertation Committees

University of South Florida

<u>Committee Role</u>	<u>Name</u>	<u>School/College</u>	<u>Program</u>	
Member	Abbigail Barlett, B.S.	Medicine	Ph.D.	2024-present

LSUHSC-NO

<u>Committee Role</u>	<u>Name</u>	<u>School/College</u>	<u>Program</u>	
Member	Jake Doiron, Ph.D.	Medicine	M.D./Ph.D.	2021-2024
Member	Anna Whitehead, Ph.D.	Medicine	M.D./Ph.D.	2021-2023

Summer Undergraduate Students

<u>Name</u>	<u>School/College</u>	
Nikhilesh Alahari, B.S.	Louisiana State University	2021
Amelia Haydel, B.S.	University of Mississippi	2019
Abhiraj Pudhota, B.S.	Temple University	2016
Reaghan O'Connor B.S.	Temple University	2015-2016

LECTURE BY INVITATION

International:

ESC, Frontiers of CardioVascular Biology – Vienna, Austria 2018
Session Title: Uncoordinated signaling in diseased cardiomyocyte: potential role of beta 3 adrenergic receptors
Title: *"Beta3AR and ischemia–reperfusion"*

National:

Conference:

American Heart Association, Basic Cardiovascular Science (BCVS) 2025
Scientific Session, Baltimore, Maryland
Session Title: Pathophysiologic and Systemic Axes Beyond the Heart
Title: *"Renal Denervation in Heart Failure"*

Heart Failure with Preserved Ejection Fraction (HFpEF) Summit 2025, 2025
Beverly Hills, California
Session Title: Obesity and Cardiometabolic HFpEF
Title: *"Renal Denervation to Treat Cardiometabolic HFpEF"*

American Heart Association, Scientific Sessions, Virtual 2021
Session Title: HFpEF: Why Does It Happen and How Do We Study It
Title: *"Animal Models of HFpEF"*

Society of Toxicology, Annual Meeting, Virtual 2021
(Sponsored by Marshall BioResources and Ellegaard)
Title: *"Novel Gottingen Minipig Model of Heart Failure with Preserved Ejection Fraction"*

Marshall BioResources, Gottingen Minipig Symposium, Chicago, Illinois 2018
Title: *"Swine Models of Cardiovascular Disease: Tools to study Metabolic Syndrome, Dyslipidemia, Myocardial Infarction and Many More"*

American Heart Association, Scientific Sessions, Chicago, Illinois 2018
Session Title: Animal Models and Translational Insights

Title: *"Nitrite Therapy: From Small and Large Animals to Clinical Trials"*

American Heart Association, Scientific Sessions, Anaheim, California 2017
Session Title: Non-conical Mechanisms of Cardiac Conduction
Title: *"Renal Denervation for Heart Failure"*

Institutional:

USF, Heart Institute, Inaugural Symposium 2025
Title: *"Microbiota, Metabolites, and Myocardium: Cardiovascular Consequences of Alcohol-Induced Gut Dysbiosis"*

USF, Heart Institute, Hypertension and Kidney Research Center 2024
Title: *"Renal Denervation: Therapeutic Implications Beyond Hypertension"*

USF, Dept. of Molecular Pharmacology & Physiology 2022
Title: *"Gut Microbial-derived Phenylacetylglutamine Accumulation Leads to Cardiovascular Dysfunction"*

Louisiana State University - HSC, Cardiovascular Center of Excellence 2016
Title: *"Cortical Bone Stem Cells Preserve Cardiac Structure and Function Post MI in Swine"*

SCHOLARLY ACTIVITY

A) Current Grants

Extramural:

Agency: NIH/NIAAA
I.D.#: R01 AA029984
Title: "Alcohol-induced Gut Dysbiosis and CVD"
P.I.: Thomas Sharp, Ph.D.
Percent effort: 40%
Direct costs per year: \$284,000.00
Total cost per project: \$1,419,865.00
Project period: 04/2022 – 03/2027

B) Pending Grants

Extramural:

Agency: NIH/NHLBI
I.D.#: N/A
Title: "The Nexus between Gut Microbial Metabolites, Endogenous H₂S, and HFpEF"
P.I.: Thomas Sharp, Ph.D.; DJ Lefer, Ph.D. (Co-I)
Percent effort: 30%
Direct costs per year: \$250,000.00
Total cost per project: \$3,000,000.00
Project period: NMHD IRG Review - Impact Score: 32 Percentile:17 Resubmission 07/2025

Agency: American Heart Association Transformative Project Award
I.D.#: 25TPA1470024
Title: "Role of novel MCU variant in the platelets"
P.I.: Jin O-Uchi, Ph.D.
Role on Project: Co-Investigator

Percent effort: 5%
Direct costs per year: \$90,910.00
Total cost per project: \$100,000.00
Project period: Submitted, pending Review 06/2025

C) Past Grants

Extramural:

Agency: NIH/NHLBI
I.D.#: 5R01HL070241-16
Title: "Insulin-like Growth Factor-1 and Atherosclerosis"
P.I.: Patrice Delafontaine, M.D.
Role on Project: LSU Site Principal Investigator
Percent effort: 15%
Direct costs per year: \$435,000.00
Total cost per project: N/A
Project period: Relinquished

Agency: ReCor Medical, Otsuka Medical Devices Co. Ltd.
I.D.#: Industry Study
Title: "Cardioprotective Effects of RDN on LV Remodeling Following AMI"
P.I.: Traci Goodchild, Ph.D.
Role on Project: Co-Investigator
Percent effort: 5%
Direct costs per year: N/A
Total cost per project: \$222,015.00
Project period: Project period: 10/2021 – 09/2022

Agency: Selah Therapeutics, Juvenescence, Ltd.
I.D.#: Industry Study
Title: "Effects of β -Hydroxybutyrate on Exercise Capacity in ZSF1 Ob Rat HFpEF"
P.I.: Thomas Sharp, Ph.D.
Percent effort: 5%
Direct costs per year: N/A
Total cost per project: \$21,213.56
Project period: Project period: 04/2022 – 01/2023

Intramural:

Agency: Louisiana State University
I.D.#: Lift² Grant
Title: "Rotational Passage: The Development of a Motorized Device to Apply Rotational Forces on Endovascular Guidewires and Angioplasty Hardware"
P.I.: Scott C. Laura, M.D.
Role on Project: Co-Investigator
Percent effort: 1% (no salary)
Direct costs per year: N/A
Total cost per project: \$35,335.00
Project period: Project period: 02/2022– 01/2023

Agency: LSUHSC Alcohol and Drug Abuse Center of Excellence
 I.D.#: Pilot Project
 Title: "Alcohol induced gut dysbiosis and cardiovascular disease"
 P.I.: Thomas Sharp, Ph.D.
 Percent effort: 10% (no salary)
 Direct costs per year: N/A
 Total cost per project: \$15,000.00
 Project period: Project period: 02/2022– 01/2023

PUBLISHED BIBLIOGRAPHY

Publications: 48 **ORCID ID:** 0000-0001-8706-9825
Google Scholar: Total Citations: 1,497 **Scopus ID:** 55195798600
 H-index: 20 **Web of Sci.:** MGW-1581-2025
 i10-index: 31

Peer-Reviewed: ORIGINAL RESEARCH MANUSCRIPTS

1. Duran JM, Taghavi S, Berretta RM, Makarewich CA, **Sharp III T**, Starosta T, Udeshi F, George JC, Kubo H, Houser SR. A Characterization and Targeting of the Infarct Border Zone in a Swine Model of Myocardial Infarction. ***Clinical and Translational Science*** 2012. 5(5): 416-421. ***Journal Impact Factor (JIF): 3.1***
2. Taghavi S, Duran JM, Berretta R, Makarewich CA, Udeshi F, **Sharp III TE**, Kubo H, Houser SR, George JC. Validation of transcatheter left ventricular electromechanical mapping for assessment of cardiac function and targeted transendocardial injection in a porcine ischemia-reperfusion model. ***American Journal of Translational Research*** 2012; 4(2):240-246. ***JIF: 1.7***
3. Wang F, Gao H, Kubo H, Fan X, Zhang H, Berretta R, Chen X, **Sharp T**, Starosta T, Makarewich C, Li Y, Molkentin JD, Houser SR. (2013). T-type Ca(2)(+) channels regulate the exit of cardiac myocytes from the cell cycle after birth. ***Journal of Molecular & Cellular Cardiology*** 2013. 62: 122-130. ***JIF: 4.9***
4. Duran JM, Makarewich CA, **Sharp TE**, Starosta T, Zhu F, Hoffman NE, Chiba Y, Madesh M, Berretta RM, Kubo H, Houser SR. Bone-derived stem cells repair the heart after myocardial infarction through transdifferentiation and paracrine signaling mechanisms. ***Circulation Research*** 2013; 113:539-552. ***JIF: 16.5 (Top 10, Cardiac & Cardiovascular Systems)***
5. Duran JM, Makarewich CA, Trappanese DM, Gross P, Husain S, Dunn J, Lal H, **Sharp TE**, Starosta T, Vagnozzi RJ, Berretta RM, Barbe M, Yu D, Gao E, Kubo H, Force T, Houser SR. Sorafenib Cardiotoxicity Increases Mortality after Myocardial Infarction. ***Circulation Research*** 2014. ***JIF: 16.5 (Top 10, Cardiac & Cardiovascular Systems)***
6. Taghavi S, **Sharp TE, 3rd**, Duran JM, Makarewich CA, Berretta RM, Starosta T, Kubo H, Barbe M, Houser SR. Autologous c-kit+ mesenchymal stem cell injections provide superior therapeutic benefit as compared to c-kit+ cardiac-derived stem cells in a feline model of

isoproterenol-induced cardiomyopathy. *Clinical Translational Science* 2015. **JIF: 2.1**

7. Mohsin S, Troupes C.D, Starosta T, **Sharp TE**, Agra EJ, Smith SC, Duran JM, Zalavadia N, Zhou Y, Kubo H, Berretta RM, Houser SR. Unique Features of Cortical Bone Stem Cells Associated with Repair of the Injured Heart. *Circulation Research* 2015. 15(115): 307362. **JIF: 16.5 (Top 10, Cardiac & Cardiovascular Systems)**
8. Gross P, Honnorat N, Varol E, Wallner M, Trappanese DM, **Sharp TE**, Starosta T, Duran JM, Koller S, Davatzikos C, Houser SR. Nuquantus: Machine learning software for the characterization and quantification of cell nuclei in complex immunofluorescent tissue images. *Scientific Reports* 2016; 6:23431. **JIF: 3.8**
9. Wallner M, Duran JM, Mohsin S, Troupes CD, Vanhoutte D, Borghetti G, Vagnozzi RJ, Gross P, Yu D, Trappanese DM, Kubo H, Toib A, **Sharp TE**, Harper SC, Volkert MA, Starosta T, Feldsott EA, Berretta RM, Wang T, Barbe MF, Molkentin JD, Houser SR. Acute catecholamine exposure causes reversible myocyte injury without cardiac regeneration. *Circulation Research* 2016. **JIF: 16.5 (Top 10, Cardiac & Cardiovascular Systems)**
10. Lubitz AL, Sjöholm LO, Goldberg A, Pathak A, Santora T, **Sharp TE, 3rd**, Wallner M, Berretta RM, Poole LA, Wu J, Wolfson MR. Acute right heart failure after hemorrhagic shock and trauma pneumonectomy-a management approach: A blinded randomized controlled animal trial using inhaled nitric oxide. *Journal of Trauma and Acute Care Surgery* 2017;82:243-251. **JIF: 3.0**
11. Toib A, Zhang C, Borghetti G, Wallner M, Yang Y, Troupes C, Kubo H, **Sharp TE**, Feldsott E, Berretta RM, Zalavadia N, Trappanese D, Harper S, Gross P, Chen X, Mohsin S, Houser SR. Remodeling of Repolarization and Arrhythmia Susceptibility in a Myosin Binding Protein C Knockout Mouse Model. *American Journal of Physiology Heart Circulation Physiology* 2017;ajpheart 00167 2017. **JIF: 4.1**
12. **Sharp TE**, Schena GJ, Hobby AR, Starosta T, Berretta RM, Wallner M, Borghetti G, Gross P, Yu D, Johnson J, Feldsott E, Trappanese DM, Toib A, Rabinowitz JE, George JC, Kubo H, Mohsin S, Houser SR. Cortical bone stem cell therapy preserves cardiac structure and function after myocardial infarction. *Circulation Research.* 2017;121:1263-1278. **JIF: 16.5 (Top 10, Cardiac & Cardiovascular Systems)**
13. Wallner M, Eaton DM, Berretta RM, Borghetti G, Wu J, Baker ST, Feldsott EA, **Sharp TE**, Mohsin S, Oyama MA, von Lewinski D, Post H, Wolfson MR, Houser SR. A feline HFpEF model with pulmonary hypertension and compromised pulmonary function. *Scientific Reports* 2017;7:16587. **JIF: 3.8**
14. **Sharp TE**, Kubo H, Berretta RM, Starosta T, Wallner M, Schena GJ, Hobby AR, Yu D, Trappanese DM, George JC, Molkentin JD, Houser SR. Protein Kinase C Inhibition with Ruboxistaurin Increases Contractility and Reduces Heart Size in a Swine Model of Heart Failure

with Reduced Ejection Fraction. **JACC: Basic to Translational Science**. 2017;2:669-683. **JIF: 8.4 (Top 20, Cardiac & Cardiovascular Systems)**

15. Bradley JM, Spaletta P, Li Z, **Sharp TE, 3rd**, Goodchild TT, Corral LG, Fung L, Chan KW, Sullivan RW, Swindlehurst CA, Lefer DJ. A novel fibroblast activation inhibitor attenuates left ventricular remodeling and preserves cardiac function in heart failure. **American Journal of Physiology Heart Circulation Physiology** 2018. **JIF: 4.1**
16. **Sharp TE**, Polhemus DJ, Li Z, Spaletta P, Jenkins JS, Reilly JP, White CJ, Kapusta DR, Lefer DJ, Goodchild TT. Renal denervation prevents heart failure progression via inhibition of the renin-angiotensin system. **Journal of the American College of Cardiology**. 2018;72:2609. **JIF: 21.7 (Top 5, Cardiac & Cardiovascular Systems)**
17. Li Z, Organ CL, Kang J, Polhemus DJ, Trivedi RK, **Sharp TE**, Jenkins JS, Tao Y-x, Xian M, Lefer DJ. Hydrogen sulfide attenuates renin angiotensin and aldosterone pathological signaling to preserve kidney function and improve exercise tolerance in heart failure. **JACC: Basic to Translational Science**. 2018; 3: 796. **JIF: 8.4 (Top 20, Cardiac & Cardiovascular Systems)**
18. Polhemus DJ, Trivedi RK, **Sharp TE**, Li Z, Goodchild TT, Scarborough A, de Couto G, Marbán E, Lefer DJ. Repeated cell transplantation and adjunct renal denervation in ischemic heart failure: Exploring modalities for improving cell therapy efficacy. **Basic Research in Cardiology**. 2019;114:9. **JIF: 7.5**
19. Hobby ARH, **Sharp TE**, Berretta RM, Borghetti G, Feldsott E, Mohsin S, Houser SR. Cortical bone-derived stem cell therapy reduces apoptosis after myocardial infarction. **American Journal of Physiology- Heart and Circulatory Physiology**. 2019;317:H820-H829. **JIF: 4.1**
20. Organ CL, Li Z, **Sharp TE**, Polhemus DJ, Gupta N, Goodchild TT, Tang WHW, Hazen SL, Lefer DJ. Nonlethal inhibition of gut microbial trimethylamine n-oxide production improves cardiac function and remodeling in a murine model of heart failure. **Journal of the American Heart Association**. 2020; 9: e016223. **JIF: 5.0**
21. **Sharp TE**, Gong Z, Scarborough A, Goetzman ES, Ali MJ, Spaletta P, Lefer DJ, Muzumdar RH, Goodchild TT. Efficacy of a novel mitochondrial-derived peptide in a porcine model of myocardial ischemia/reperfusion injury. **JACC: Basic to Translational Science**. 2020:466. **JIF: 8.4 (Top 20, Cardiac & Cardiovascular Systems)**
22. Xia H, Li Z, **Sharp TE**, Polhemus DJ, Carnal J, Moles KH, Tao YX, Elrod J, Pfeilschifter J, Beck KF, Lefer DJ. Endothelial cell cystathionine γ -lyase expression level modulates exercise capacity, vascular function, and myocardial ischemia reperfusion injury. **Journal of the American Heart Association**. 2020; 9: 017544. **JIF: 5.0**
23. **Sharp TE**, Scarborough AL, Li Z, Polhemus DJ, Hidalgo HA, Schumacher JD, Matsuura TR, Jenkins JS, Kelly DP, Goodchild TT,

- Lefer DJ. Novel Gottingen miniswine model of heart failure with preserved ejection fraction integrating multiple comorbidities. **JACC: Basic to Translational Science.** 2021; 6: 154-170. **JIF: 8.4 (Top 20, Cardiac & Cardiovascular Systems)**
24. Whitehead A, Fried N, Li Z, Neelamegan K, Pearson C, LaPenna K, **Sharp T**, Lefer D, Lazartigues E, Gardner J, Yue X. Alpha7 Nicotinic Acetylcholine Receptor Mediates Chronic Nicotine Inhalation-Induced Cardiopulmonary Dysfunction. **Clinical Science.** 2022. **JIF: 6.7**
25. Li Z, Xia H, **Sharp III TE**, LaPenna KB, Elrod JW, Calvert JW, Salloum FN, Chau VQ, Noriyuki N, Goodchild TT, Lefer DJ. Mitochondrial H2S Regulates BCAA Catabolism in Heart Failure. **Circulation Research.** 2022; 131: 222-235. **JIF: 16.5 (Top 10, Cardiac & Cardiovascular Systems)**
26. Li Z, Xia H, **Sharp III TE**, LaPenna KB, Katsouda A, Elrod JW, Pfeilschifter J, Beck K, Xu S, Xian M, Goodchild TT, Papapetropoulos A, Lefer DJ. Hydrogen Sulfide Modulates Endothelial-Mesenchymal Transition in Heart Failure. **Circulation Research.** 2023; 132: 2,154-166. **JIF: 16.5 (Top 10, Cardiac & Cardiovascular Systems)**
27. LaPenna K, Li Z, Doiron JE, **Sharp III TE**, Xia H, Moles K, Koul K, Wang JS, Polhemus DJ, Goodchild TT, Patel RB, Shah SJ, Lefer DJ. Combination Sodium Nitrite and Hydralazine Therapy Attenuates HFpEF Severity in a "Two-Hit" Murine Model. **Journal of the American Heart Association.** 2023. 0: e028480. **JIF: 5.0**
28. Sukhanov S, Higashi Y, Yoshida T, Danchuk S, Alfortish M, Goodchild, Scarborough A, **Sharp T**, Jenkins JS, Garcia D, Ivey J, Tharp DL., Schumacher J, Rozenbaum Z, Kolls JK, Bowles D, Lefer DJ, Delafontaine P. Insulin-like growth factor 1 reduces coronary atherosclerosis in pigs with familial hypercholesterolemia. **JCI Insight.** 2023. 8(4). **JIF: 6.3**
29. Whitehead A, Li Z, LaPenna K, Abbes N, **Sharp T**, Lefer D, Lazartigues E, Yue X. Cardiovascular dysfunction induced by combined exposure to nicotine inhalation and high fat diet. **American Journal of Physiology-Heart and Circulatory Physiology.** 2024. **JIF: 4.1**
30. Fenwick AJ, Jani VP, Foster DB, **Sharp TE**, Goodchild TT, Lapenna K, Doiron JE, Lefer DJ, Hill JA, Kass DA, Cammarato A. Common Heart Failure with Preserved Ejection Fraction Animal Models Yield Disparate Myofibril Mechanics. **Journal of the American Heart Association.** 2024. **JIF: 5.0**
31. Doiron JE, Li Z, **Sharp TE**, LaPenna KB, Koul K, Malek AJ, Shah SJ, Patel RB, Goodchild TT, Kapusta DR, Lefer DJ. Early Renal Denervation Attenuates Cardiorenal Dysfunction in Heart Failure with Preserved Ejection Fraction. **Journal of the American Heart Association.** 2024. **JIF: 5.0**
32. Doiron JE., Xia H, Yu X, Nevins AR, LaPenna KB, **Sharp TE**, Goodchild TT, Allerton TD, Elgazzaz M, Lazartigues E, Shah SJ, Li, Z, Lefer DJ. Adjunctive Therapy with an Oral H₂S Donor Provides Additional

- Therapeutic Benefit Beyond SGLT2 Inhibition in Cardiometabolic HFpEF. Nov;181(21):4294-4310. doi: 10.1111/bph.16493. **British Journal of Pharmacology**. 2024. **JIF: 6.8 (Top 20, Pharmacology)**
33. Greiffenstein P, Cavalea A, Smith A, **Sharp T**, Warren O, Dennis J, Gatterer C, Danos D, Byrne T, Scarborough A, Deville P, VanMeter K. Effects of CPR on perfusion in a porcine model of severe hemorrhagic shock. **Journal of Trauma and Acute Care Surgery**. 98(2):p 251-257. 2024. **JIF: 3.0 (Top 20, Critical Care)**
 34. Jani VP, Fenwick AJ, **Sharp T**, Doiron JE, LaPenna K, Goodchild T, Jiang N, Gillette T, Hill JA, Lefer DJ, Cammarato A, Kass DA. Cardiomyocyte Myofilament Function in Common Animal Models of Heart Failure with Preserved Ejection Fraction. **Journal of Molecular and Cellular Cardiology**. 2024. **JIF: 4.9**
 35. Li Z, Gu M, Zaparte A, Fu,X, Mahen K, Mrdjen M, Li XS, Yang Z, Ma J, Thoudam T, Chandler K, Hesler M, Heathers L, Gorse K, Van TT, Wong D, Gibson AM, Wang Z, Taylor CM, Quijada P, Makarewich CA, Hazen SL, Liangpunsakul S, Brown JM, Lefer DJ, Welsh DA, **Sharp III TE**. Alcohol-induced gut microbial reorganization and associated overproduction of phenylacetylglutamine promotes cardiovascular disease. <https://doi.org/10.1038/s41467-024-55084-2> **Nature Commun** 15, 10788. 2024. **JIF: 14.7 (Top 10, Multidisciplinary Sciences)**
 36. Martinez Naya N, **Sharp TE**, Sgai MG, Capcha JMC, Shehadeh LA. Comprehensive Echocardiographic Protocol for Pigs with Emphasis on Diastolic Function: Advantages over MRI Assessment. **American Journal of Physiology-Heart and Circulatory Physiology**. 2025. **JIF: 4.1**
 37. Lefer DJ, **Sharp TE**, Scarborough AL, Haydel AG, Shah SJ, Goodchild TT. Renal Denervation Improves Cardiac Function and Exercise Duration in a Miniswine Model of Heart Failure with Preserved Ejection Fraction. **European Journal of Heart Failure**. 2025 **JIF: 16.9 (Top 5, Cardiac & Cardiovascular Systems)**
 38. Doiron JE, Elbatreek MH, Xia H, Yu X, Gehred ND, Gromova T, Chen J, Driver IH, Muraoka N, Jensen M, Shambu S, Tang WHW, LaPenna KB, **Sharp III TE**, Goodchild TT, Xian M, Xu S, Quiriarte H, Allerton TD, Zagouras A, Wilcox J, Shah SJ, Pfeilschifter J, Beck KF, Vondriska TM, Li Z, Lefer DJ. Hydrogen Sulfide Deficiency and Therapeutic Targeting in Cardiometabolic HFpEF: Evidence for Synergistic Benefit with GLP-1/Glucagon Agonism. **In press at JACC: Basic to Translational Science**. 2025. **JIF: 8.4 (Top 20, Cardiac & Cardiovascular Systems)**
 39. Gibb A, LaPenna K, Gaspar R, Latchman N, Tan Y, Choya-Foces C, Doiron J, Li Z, Xia H, Lazaropoulos M, Conwell M, **Sharp III T**, Goodchild T, Lefer D, Elrod J. Integrated systems biology identifies disruptions in mitochondrial function and metabolism as key contributors to heart failure with preserved ejection fraction (HFpEF). **In press at JACC: Basic to Translational Science**. 2025. **JIF: 8.4 (Top 20, Cardiac & Cardiovascular Systems)**

REVIEW ARTICLES

40. **Sharp TE**, George JC. Stem cell therapy and breast cancer treatment: Review of stem cell research and potential therapeutic impact against cardiotoxicities due to breast cancer treatment. *Frontiers in Oncology*. 2014;4. **JIF: 3.5**
41. Knezevic T, Myers VD, Gordon J, Tilley DG, **Sharp TE, 3rd**, Wang J, Khalili K, Cheung JY, Feldman AM. BAG3: A new player in the heart failure paradigm. *Heart Failure Reviews* 2015. **JIF: 4.5**
42. **Sharp TE**, Lefer DJ. Renal Denervation to Treat Heart Failure. *Annual Review of Physiology*. 2021; 83. **JIF: 15.8 (Top 5, Physiology)**

LETTERS, EDITORIALS, AND COMMENTARY

43. Recchia FA, **Sharp TE**. Combination cell therapy for ischemic cardiomyopathy: Is the whole greater than sum of its parts? *Journal of the American College of Cardiology*. 2017;70:2516-2518. **JIF: 21.7 (Top 5, Cardiac & Cardiovascular Systems)**
44. Lefer DJ, **Sharp TE**. Angiotensin receptor-neprilysin inhibitors emerge as potential treatment for acute myocardial infarction. *Journal of the American College of Cardiology*. 2018; 72:2357-2359. **JIF: 21.7 (Top 5, Cardiac & Cardiovascular Systems)**
45. **Sharp TE**, Lefer DJ, Houser SR. Cardiometabolic heart failure and HFpEF. Still Chasing Unicorns. *JACC: Basic to Translational Science*. 2019; 4:422-424. **JIF: 8.4 (Top 20, Cardiac & Cardiovascular Systems)**
46. **Sharp TE**, Lefer DJ, Goodchild TT. Reply: Tolerating Large Preclinical Models of HFpEF But Without the Intolerance? *JACC: Basic to Translational Science*. 2021; 4:422-424. **JIF: 8.4 (Top 20, Cardiac & Cardiovascular Systems)**
47. **Sharp TE**. Gottingen Minipigs: Modeling heart failure with preserved ejection fraction (HFpEF). *Gottingen Minipig Magazine*. 2022; No. 62.
48. **Sharp TE**, Van TT. Thromboxane A2 blockade attenuates ethanol-induced myocardial inflammation: Sipping from the same bottle. *Alcohol: Clinical and Experimental Research*. 2024. **JIF: 3.0**

ORIGINAL RESEARCH UNDER REVIEW OR IN PREPARATION

1. **Sharp TE**, Scarborough AL, Jenkins JS, Prince M, Gupta A, Rader F, Li Z, Lefer DL, Goodchild TT. Prior Ultrasound Renal Denervation Attenuates Early Cardiac Remodeling after Acute Myocardial Infarction in a Swine Model of Hypertensions and Dyslipidemia. *Revision submitted at Clinical and Translational Science*. **JIF: 3.1**

2. Li Z, LaPenna KB, Gehred ND, Yu X, Tang WHW, Doiron JE, Xia H, Chen J, Driver IH, Sachse FB, Katsouda A, Zampas P, Haydel AG, Quiarte H, Zagouras A, Wilcox J, Gromova T, Patel RB, Shah SJ, Goodchild TT, Allerton TD, Jensen MB, Papapetropoulos A, **Sharp III TE**, Vondriska TM, Lefer DJ. Multi-organ Dysregulation of Nitrosylation Dynamics Promotes Nitrosative Stress and Contributes to Cardiometabolic Heart Failure with Preserved Ejection Fraction. *In revision at Circulation Research. JIF: 16.5 (Top 10, Cardiac & Cardiovascular Systems)*

OTHER RESEARCH AND CREATIVE ACHIEVEMENTS

Certifications

1. NOGA® Electromechanical Guidance for Catheter-based Trans- 2012
endocardial Injection, Biosense Webster – Johnson & Johnson

Patents

1. Steven R. Houser, Hajime Kubo, Jason M. Duran, **Thomas E. Sharp**. "Cortical Bone-Derived Stem Cells". EPO: EP3013945B1 (Active 2020); WPO: WO2014210142A1; USPO: US20160152952A1 Pending
2. David J. Lefer, **Thomas Sharp**, Traci T. Goodchild. "A hypertension animal model and methods of use". WPO: WO2021263127A1; USPO: US20230233713A1 Pending

SERVICE

University/Institutional Services

University of South Florida – Morsani College of Medicine

<i>Ad hoc</i> , Selection Committee for NIDDK 1R24DK134324 <i>RENUM-FL</i>	2025
Member, Graduate School Student Support Program, MCOM, USF	2025
Member, Graduate School Admissions Committee, MCOM, USF	2024-present

LSUHSC-NO

Judge, Graduate Research Day, School of Graduate Studies	2017-2019
--	-----------

External Services

Member, Scientific Advisory Board at NAD Research Incorporation	2017-2020
---	-----------

Professional Society Membership

Member, American Heart Association (AHA)	2013-present
Member, International Society of Heart Research (ISHR)	2016-present
Member, Heart Failure Society of America (HFSA)	2019-present
Member, American Physiological Society (APS)	2020-present
Member, Sigma XI Scientific Honor Society (<i>by nomination</i>)	2025

Professional Society Service/Committees

<i>Ad Hoc</i> , Reviewer, AHA 2025 Basic Cardiovascular Science Abstracts	2025
Member, Early Career Investigator (ECI) Committee, ISHR-NAS	2022-2024

Grant-Review/Study Section

Institutional:

Ad Hoc, USF, Heart Institute, Hypertension and Kidney Research Center 2025
2025 Early-Stage Investigator Pilot Award

National:

Ad Hoc, AHA 2025 Fellowship 9 Grant Review, *Molecular Signaling* 2024
Ad Hoc, AHA 2025 Fellowship 6 Grant Review, *Cell Transport/Lipid Met.* 2024

International:

Ad Hoc, The Netherlands Org for Health R&D, ZonMw 2023
Ad Hoc, Health Research Board, Republic of Ireland 2021

Professional Meeting Chair, Organizer, Moderator

Member, Organizing Committee, HFpEF Summit 2025
Moderator, Basic Cardiovascular Science Session, American Heart Association, Chicago, IL. "*Heart Failure & Cardiomyopathies*" 2024
Member, Organizing Committee, HFpEF Summit 2023
Member, Organizing Committee, HFpEF Summit 2019
Moderator, International Society of Heart Research-North American Section, New Orleans, LA. "*HFpEF*" 2016
Moderator, American Physiological Society, Experimental Biology, San Diego, CA. "*Novel Molecular Targets and Therapeutic Approaches in Myocardial Infarction & Heart Failure*" 2016

Editorial Activity

Editorial Board:

Review Editor, *Frontiers in Cardiovascular Medicine: Heart Failure & Transplant* 2022-present

Reviewer: (16) 2022, (12) 2023, (07) 2024, (05) 2025

Ad Hoc reviewer, *Advances in Medical Education and Practice* (1)
Ad Hoc reviewer, *Alcohol: Clinical and Experimental Research* (1)
Ad Hoc reviewer, *Annals of Medicine* (1)
Ad Hoc reviewer, *Basic Research in Cardiology* (1)
Ad Hoc reviewer, *Bioengineered* (1)
Ad Hoc reviewer, *BMC Cardiovascular Disorders* (1)
Ad Hoc reviewer, *Cardiovascular Toxicology* (3)
Ad Hoc reviewer, *Cell Reports* (1)
Ad Hoc reviewer, *Frontiers in Cardiovascular Medicine* (17)
Ad Hoc reviewer, *Frontiers in Endocrinology* (2)
Ad Hoc reviewer, *Frontiers in Neuroscience* (1)
Ad Hoc reviewer, *Frontiers in Pharmacology* (1)
Ad Hoc reviewer, *Frontiers in Physiology* (3)
Ad Hoc reviewer, *Frontiers in Surgery* (2)
Ad Hoc reviewer, *International Journal of General Medicine* (3)
Ad Hoc reviewer, *Journal of the American College of Cardiology* (2)
Ad Hoc reviewer, *Journal of Applied Physiology* (4)
Ad Hoc reviewer, *njp Regenerative Medicine* (1)
Ad Hoc reviewer, *Patient Preference and Adherence* (1)

Ad Hoc reviewer, PeerJ
Ad Hoc reviewer, Theranostics

(1)
(1)