**Curriculum Vitae**

**THOMAS E. SHARP III, Ph.D.**

Assistant Professor, Dept. of Molecular Pharmacology and Physiology

Faculty, USF Health, Morsani College of Medicine, Heart Institute

**CONTACT INFORMATION:**

Work Address: University of South Florida, Morsani College of Medicine

12901 Bruce B. Downs Blvd - MDC 2525

Tampa, Florida 33612

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**PERSONAL INFORMATION:**

Current Address: 81 Harbor Woods Circle

Safety Harbor, FL 34695

Mobile: (908) 692-5626

Date of Birth: May 4, 1988

Citizenship: United States of America

Marital Status: Married – Michelle L. Sharp

Children: Reagan-Mae Ellie Sharp

 Leonard John Sharp

**EDUCATION AND TRAINING:**

B.A., 2010 Drew University, College of Liberal Arts, Department of Neuroscience

Madison, NJ, USA

Ph.D., 2017 Temple University, Lewis Katz School of Medicine, Department of Physiology,

Cardiovascular Research Center – Philadelphia, PA, USA

**Doctoral Dissertation:**

*“Drug and Cell-Based Therapies to Reduce Pathological Remodeling and Cardiac*

*Dysfunction After Acute Myocardial Infarction”*

Mentor: Steven R. Houser, Ph.D.

Postdoc, 2021 Louisiana State University, Health Science Center New Orleans

School of Medicine, Cardiovascular Center of Excellence – New Orleans, LA, USA

**ACADEMIC APPOINTMENTS:**

**Primary**

2021 – 2023 Assistant Professor (tenure-track), Department of Medicine, Section of Cardiology, School of Medicine, LSUHSC – NO

2021 – 2023 Faculty, Cardiovascular Center of Excellence, School of Medicine, LSUHSC – NO

2022 – 2023 Director, Translational Core Laboratory, Cardiovascular Center of Excellence, School of Medicine, LSUHSC-NO

2023 – present Assistant Professor (tenure-track), Department of Molecular Pharmacology and Physiology, Morsani College of Medicine, University of South Florida

2023 – present Faculty, Heart Institute, USF Health

**PROFESSIONAL MEMBERSHIPS:**

2013 – Present Member, American Heart Association

2019 – Present Member, International Society of Heart Research

2019 – Present Member, Heart Failure Society of America

2021 – Present Member, American Physiological Society

**PROFESSIONAL MEETING CHAIR OR ORGANIZER:**

2016 Session Co–Chair, Novel Molecular Targets and Therapeutic Approaches in

Myocardial Infarction and Heart Failure, American Physiological Society – Experimental Biology, San Diego, California

2016 Session Co–Chair, Heart Failure with Preserved Ejection Fraction, International

Society of Heart Research – North American Section Meeting, New Orleans, Louisiana

2019, 23, 25 Member, Organizing Committee, HFpEF Summit

**PROFESSIONAL SOCIETY COMMITTEES:**

2022 – 2024 Member, Early Career Investigator Committee, International Society of Heart

Research – North American Section

**CONSULTING & SCIENTIFIC ADVISORY BOARDS (Industry):**

2017 – 2019 Member, Scientific Advisory Board at NAD Research Incorporation

**HONORS & AWARDS:**

2014 – 2016 American Heart Association Predoctoral Fellowship

2015 Cover Illustration in Circulation Research (Circ Res. 2015 Nov 6; 117(11):926-32.)

2017 Mary P. Wiedeman Award in Physiology, Lewis Katz School of Medicine

2018 – 2020 American Heart Association Postdoctoral Fellowship

2019 International Society of Heart Research World Congress NAS – Travel Award

**CERTIFICATIONS:**

2012 Electromechanical Guidance for Catheter-based Transendocardial Injection, Biology Delivery System – Johnson & Johnson

**ACADEMIC ADMINISTRATIVE DUTIES:**

2015 – 2017 Coordinator, Biorepository, Temple University, Lewis Katz School of Medicine,

 Cardiovascular Research Center

2017 – 2018 Coordinator, LSUHSC-NO Cardiovascular Center of Excellence Seminar Series

2021 – 2023 Associate Member, Faculty, School of Graduate Studies, LSUHSC – NO

**Thesis Committees (TC) and Dissertation Committees (DC):**

2021 – 2023 Member, Anna Whitehead – LSUHSC-NO, M.D./Ph.D. Program, Dept. of Physio.

2022 – 2024 Member, Jake Doiron – LSUHSC-NO, M.D./Ph.D. Program, Dept. of Pharm.

**UNIVERSITY/INSTITUTIONAL SERVICE:**

2021 Judge, Graduate Research Day, LSUHSC-NO, School of Graduate Studies

**EDUCATIONAL RESPONSIBILITIES:**

**INSTRUCTOR or LECTURER**

**Institution/Course Year School/College # Students Hours**

**LSUHSC-NO**

HLSC24101: Human Physiology Vasculature2022 (F) Nursing 171 2

 2022 (S) Nursing 2

 2023 (S) Nursing 2

HLSC34101: Pathophysiology, Cardiovascular 2022 (F) Nursing 99 2

Diseases & Heart Failure 2022 (S) Nursing 2

 2023 (F) Nursing 2

2023 (S) Nursing 2

**University of South Florida**

BMS6633 Medical Sciences 2: Cardio. and 2023(F) Medicine 8-10 per/hr. 4

Pul. Systems – ECG & Spirometry Laboratory

**MENTORING:**

**Graduate Students (Ph.D. Program)**

Current:

2023 – Present Thanh Trung Van, B.S./M.S., USF Health, Morsani College of Medicine

**Medical Students**

2019 (Summer) Josh Deblieaux, B.S., LSUHSC – NO, School of Medicine

2020 (Summer) Matthew Shields, B.S., LSUHSC – NO, School of Medicine

2021 (Summer) Kashyap Koul, B.S., LSUHSC – NO, School of Medicine

**Undergraduate Research Program**

2015 (F) – 2016 (S) Reaghan O’Connor, Temple University

2016 (Summer) Abhiraj Pudhota, Temple University

2019 (Summer) Amelia Haydel, University of Mississippi

2021 (Summer) Nikhilesh Alahari, Louisiana State University

**GRANTS & CONTRACTS:**

Current Funding

1. **National Institutes of Health – NIAAA:** R01AA029984  **Date:** 04/2022 – 3/2027

“Alcohol-induced Gut Dysbiosis and Cardiovascular Disease”

Principal Investigator: Sharp, TE (40% Effort)

Total Direct: $1,419,865.00

Completed Funding

**Extramural:**

1. **National Institutes of Health – NHLBI:** R01- 4th Percentile **Date:** Relinquished

“Insulin-like Growth Factor-1 and Atherosclerosis”

Principal Investigator(s): Delafontaine, P. (Tulane)

Sharp, TE (LSUHSC-NO Site) (15% Effort)

Total Direct: $435,000.00

1. **ReCor Medical, Otsuka Medical Devises Co. Ltd.:** **Date:** 10/2021 – 09/2022

“Cardioprotective Effects of RDN on LV Remodeling Following Acute Myocardial Infarction”

Principal Investigator: Goodchild, TT

Co-Investigator: Sharp, TE (5% Effort)

Total Direct: $222,015.00

1. **Selah Therapeutics, Juvenescence, Ltd.: Date:** 04/2022 – 01/2023

“Effects of β-Hydroxybutyrate on Exercise Capacity in ZSF-1 Obese Rat HFpEF Model”

Principal Investigator: Sharp, TE (5% Effort)

Total Direct: $21,213.56

**Intramural:**

1. **Louisiana State University – Lift2 Grant: Date:** 02/2022 – 01/2023

**“**Rotational Passage: The Development of a Motorized Device to Apply Rotational Forces on Endovascular Guidewires and Angioplasty Hardware”

Principal Investigator: Laura, SC

Co-Investigator: Sharp, TE (1.0% Effort – No salary)

Total Direct: $35,335.00

1. **LSUHSC Alcohol and Drug Abuse Center of Excellence: Date:** 02/2022 – 01/2023

**Pilot Project Grant** *“Alcohol induced gut dysbiosis and cardiovascular disease”*

Principal Investigator: Sharp, TE (10% Effort – No salary)

Total Direct: $15,000.00

**EDITORIAL ACTVITIES:**

*Editorial Board:*

2022 – Present Review Editor, Frontiers in Cardiovascular Medicine *- Heart Failure & Transplantation*

*Ad Hoc Reviewer:**(Since 2021); 16 – 2022; 11 – 2023*

Advances in Medical Education and Practice (1)

Alcohol: *Clinical and Experimental Research* (1)

Basic Research in Cardiology (1)

Bioengineered (1)

Cardiovascular Toxicology (3)

Frontiers in *Cardiovascular Medicine* (16)

Frontiers in *Neuroscience* (1)

Frontiers in *Physiology* (2)

International Journal of General Medicine (3)

Journal of American College of Cardiology (2)

Journal of Applied Physiology (4)

Patient Preference and Adherence (1)

Theranostics (1)

**GRANT REVIEW ACTIVITIES:**

**Extramural:**

*International:*

2021 *Ad Hoc*, Health Research Board, Republic of Ireland

2023 *Ad Hoc*, The Netherlands Organization for Health Research and Development, ZonMw

**INVENTIONS & PATENTS:**

**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

1. David J. Lefer, **Thomas Sharp**, Traci T. Goodchild. “A hypertension animal model and methods of use”. WPO: WO2021263127A1; USPO: US20230233713A1 Pending

**BIBLIOGRAPHY:**

**Google Scholar**: Publications: 35; Total Citations: 1155; H-index: 18; i10-index: 25

**ORCID ID**: orcid.org/0000-0001-8706-9825

**Scopus Author ID**: [55195798600](http://www.scopus.com/inward/authorDetails.url?authorID=55195798600&partnerID=MN8TOARS)

**Peer-Reviewed Journal Publications:**

*Original Research:*

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
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
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.
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
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.
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
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.
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
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
10. Lubitz AL, Sjoholm 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 Acute Care Surgery.*** 2017;82:243-251
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
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
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
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
15. Bradley JM, Spaletra 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
16. **Sharp TE**, Polhemus DJ, Li Z, Spaletra 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
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
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
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
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
21. **Sharp TE**, Gong Z, Scarborough A, Goetzman ES, Ali MJ, Spaletra 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
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
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
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
25. Li Z, Xia H, **Sharp III TE**, LaPenna KB, Elrod JW, Calvert JW, Salloumn FN, Chau VQ, Noriyuki N, Goodchild TT, Lefer DJ. Mitochondrial H2S Regulates BCAA Catabolism in Heart Failure. ***Circulation Research***. 2022; 131: 222-235.
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.
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.
28. Sukhanov S, Higashi Y, Yoshida T, Danchuk S, Alfortish M, Goodchild TT, 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. ***Journal of Clinical Investigation-Insight***.2023. *8*(4).
29. Whitehead A, Li Z, LaPenna K, **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.***2023.
30. Fenwick AJ, Jani VP, Foster DB, **Sharp TE**, Goodchild TT, Lapenna K, Doiron JE, Lefer DJ, Hill JA, Kass DA, Cammarato A. Common HFpEF Animal Models Yield Disparate Myofibril Mechanics. ***Journal of the American Heart Association****.* 2023.

*Original Research Under Review or In Preparation:*

1. 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.*Under review - Journal of Trauma Acute Care Surgery.*
2. 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. *Under Review – Journal of the American Heart Association*.
3. Li Z, LaPenna K, **Sharp III TE**, Tang WH, Doiron J, Xia H, Haydel A, Quiriarte H, Wilcox J, Patel R, Shah S, Katsuoda A, Zampas P, Goodchild TT, Allerton T, Papapetropoulus P, Lefer DJ. Dysregulated Nitric Oxide Signaling in HFpEF: Role of S-Nitrosoglutathione Reductase. *In preparation.*
4. Doiron JE., Li Z., **Sharp TE.**, LaPenna KB., Koul K., Goodchild TT., Kapusta DR., Lefer DJ. Hydrogen Sulfide Deficits in Cardiometabolic HFpEF. *In preparation.* 2023.
5. Li Z., Gu M., Zaparte A., Mahen K., Wang Z., Luo M., Taylor CM., Welsh DA., Lefer DJ., Brown JM., Hazen SL., **Sharp III, TE**. Alcohol-induced gut microbial reorganization and associated overproduction of phenylacetylglutamine promotes cardiovascular disease. *In preparation.* 2023.

*Peer-Reviewed - Reviews Articles:*

1. **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
2. 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
3. **Sharp TE**, Lefer DJ. Renal Denervation to Treat Heart Failure. ***Annual Review of Physiology****.* 2021; 83.

*Letters, Editorials, and Commentary:*

1. 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
2. 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
3. **Sharp TE**, Lefer DJ, Houser SR. Cardiometabolic heart failure and HFpEF. *Still Chasing Unicorns*. ***JACC: Basic to Translational Science***. 2019;4:422-424
4. **Sharp TE**, Lefer DJ, Goodchild TT. Reply: Tolerating Large Preclinical Models of HFpEF But Without the Intolerance? ***JACC: Basic to Translational Science***. 2021;6(4):397-9.

*Abstracts (past 5-years):*

1. Hobby AR, **Sharp TE**, Feldsott E, Mohsin S, Kubo H, Berretta R, Houser SR. Abstract 249: Cortical–bone derived stem cells improve cardiac outcomes after myocardial infarction by modulating the inflammatory response. *Circulation Research*. 2018;123: A249-A249
2. Kubo H, Feldsot E, Schena G, Hobby A, Yang Y, Johnson J, Gross P, **Sharp T**, Mohsin S, Berretta R, Choi ET, Donnelly J, Christopher H, Houser SR. Abstract 336: Human bone contains primitive cells with angiogenic and immunomodulatory properties. *Circulation Research*. 2018;123: A336-A336
3. Li Z, Xia H, **Sharp T**, Hidalgo H, Noriyuki N, Elrod John W, Lefer David J. Abstract 15987: Deficiency of 3-mercaptopyruvate sulfurtransferase results in impaired mitochondrial function and increased heart failure severity. *Circulation*. 2019;140:A15987-A15987
4. Sukhanov S, Higashi Y, Danchuk S, Nikolli I, Alfortish M, Goodchild T, Scarborough A, **Sharp T**, Jenkins J, Garcia D, Schumacher J, Ivey J, Tharp D, Bowles D, Lefer D, Delafontaine P. Insulin-like growth factor i reduces atherosclerosis in rapacz pigs. *The FASEB Journal*. 2021;35
5. LaPenna K, **Sharp T**, Li Z, Xia H, Hidalgo H, Goodchild T, Lefer D. A novel mouse model of cardiometabolic heart failure with preserved ejection fraction. *The FASEB Journal*. 2021;35
6. **Sharp TE**, Blackwood EA, Scarborough AL, Glembotski CC, Lefer DJ, Goodchild TT. Abstract 14305: Diastolic Dysfunction and Activation of Ventricular and Atrial Unfolded Protein Response in a Novel Gottingen Miniswine Model of Heart Failure With Preserved Ejection Fraction. Circulation 2021;144(Suppl\_1): A14305-A.
7. Li Z, Gu M, Welsh DA, Lefer DJ, **Sharp TE**. Abstract 14292: Binge-on-Chronic Alcohol-Induced Gut Dysbiosis Results in Reduced Nitric Oxide Bioavailability and Endothelial Dysfunction. Circulation 2021;144(Suppl\_1): A14292-A.
8. Li Z, Xia H, **Sharp TE**, Lapenna K, Casin K, Liu K, Calvert JW, Nagahara N, Goodchild TT, Lefer DJ. 3-mercaptopyruvate Sulfurtransferase Deficiency Attenuates Branched-Chain Amino Acids Catabolism to Exacerbate Pressure Overload Heart Failure. Circulation 2021;144(Suppl\_1):A13524-A.
9. Li Z, Xia H, **Sharp TE**, Lapenna K, Elrod JW, Pfeilschifter J, Beck K-F, Goodchild TT, Lefer DJ. Endothelium-Derived Hydrogen Sulfide Modulates Endothelial-Mesenchymal Transition in Heart Failure. Circulation 2021;144(Suppl\_1):A13455-A.
10. Xia H, Li Z, Lapenna KB, **Sharp TE**, Moles KH, Pfeilschifter J, Beck K-F, Goodchild TT, Lefer DJ. Genetic Deletion of Cystathionine Gamma Lyase in Endothelial Cells Exacerbates Cardiovascular Dysfunction in Heart Failure With Preserved Ejection Fraction. Circulation 2021;144(Suppl\_1): A12371-A.
11. Lapenna KB, Li Z, **Sharp TE**, Hidalgo HA, Xia H, Wang JS, Moles KH, Koul K, Alahari N, Goodchild TT. Combination Therapy With Sodium Nitrite and Hydralazine Ameliorates the Severity of Heart Failure With Preserved Ejection Fraction. Circulation 2021;144(Suppl\_1):A13269-A.
12. Yang Y, Feldsott E, Hobby A, Schena G, Johnson J, Wang T, **Sharp TE**, Berretta RM, Donnely J, Haydel C, Choi ET, Mohsin S, Houser SR, Kubo H. Immune Moderating Cells Isolated From Human Bone Contribute to Post Myocardial Infarction Repair. Circulation Research 2021;129:E244.
13. LaPenna KB, Li Z, **Sharp TE**, Moles KH, Doiron JE, Xia H, Goodchild TT, Lefer DJ. Role of S-nitrosoglutathione reductase (GSNOR) Dysregulation and Nitrosative Stress in Heart Failure with Preserved Ejection Fraction. *The FASEB Journal*. 2022;36.
14. Koul K, LaPenna K, Li Z, Doiron J, Wang J, **Sharp III TE**, Lefer DJ. Nitric Oxide Therapy Attenuates Heart Failure with Preserved Ejection Fraction. *The FASEB Journal*. 2022;36. doi: <https://doi.org/10.1096/fasebj.2022.36.S1.R2429>
15. Koul K, LaPenna KB, Li Z, Doiron JE, Wang J, **Sharp III TE**, Lefer DJ. Nitric Oxide Therapy Attenuates Heart Failure with Preserved Ejection Fraction. *The FASEB Journal*. 2022;36.
16. Sukhanov s, Higashi Y, Danchuk S, Alfortish M, Goodchild T, Scarborough A, **Sharp TE**, GARCIA DC, Jenkins JS, Schumacher J, Ivey J, Tharp D, Bowles DK, Lefer DJ, Delafontaine P. Abstract 11537: IGF-1 Reduces Atherosclerosis in Rapacz Pigs. *Circulation*. 2022; 146(Suppl\_1): A11537-A11537.
17. Sukhanov, S., Higashi, Y., Yoshida, T., Danchuk, S., Alfortish, M., Goodchild, T., Scarboroogh, A., **Sharp, T.,** Schumacher, J., and Sindi, F. Insulin-like growth factor I reduces human-like coronary atherosclerosis. *The American Journal of the Medical Sciences.* 2023. 365, S2.
18. Jani, V, Fenwick, A, Mishra, S, **Sharp, TE**, Doiron, J, LaPenna, KB, Goodchild, TT, Jiang, N, Gillette, TG, Hill, JA, Lefer, DJ, and Kass, DA. Abstract P1024: Cardiomyocyte Mechanics In Animal Models Of Heart Failure With Preserved Ejection Fraction. Circulation Research. 2023.133, AP1024-AP1024. doi:10.1161/res.133.suppl\_1.P1024.
19. Li Z, Gu M, Zaparte A, Fu XM, Mahen K, Li X, Wong D, Gibson AM, Wang Z, Taylor CM, Welsh DA, Quijada P, Makarewich CA, Brown JM, Hazen SL, Lefer DJ, **Sharp TE.** Alcohol-induced Gut Dysbiosis Results in Phenylacetylglutamine Accumulation leading to Cardiovascular Dysfunction. Keystone Symposia – *Circulating Metabolic Intermediates as Fuels and Signals*. 2023

**INVITED PRESENTATIONS:**

*National:*

2016 Louisiana State University, Health Science Center, Cardiovascular Center of Excellence

**Title:** *“Cortical Bone Stem Cells Preserve Cardiac Structure and Function Post MI in Swine”*

2017 American Heart Association, Scientific Sessions, Anaheim, California

CV Seminar Non-conical Mechanisms of Cardiac Conduction

**Title:** *“Renal Denervation for Heart Failure”*

2018 Marshall BioResources, Annual Gottingen Minipig Symposium, Chicago, Illinois

**Title:** “*Swine Models of Cardiovascular Disease: Tools to study Metabolic Syndrome, Dyslipidemia, Myocardial Infarction and Many More”*

American Heart Association, Scientific Sessions, Chicago, Illinois

CV Seminar – Animal Models and Translational Insights

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

2021 Society of Toxicology, Annual Meeting, Virtual

(Sponsored by Marshall BioResources and Ellegaard)

 **Title:** *“Novel Gottingen Minipig Model of Heart Failure with Preserved Ejection Fraction”*

 American Heart Association, Scientific Sessions, Virtual

 CV Seminar – HFpEF: Why Does It Happen and How Do We Study It

 **Title:** *“Animal Models of HFpEF”*

2022 University of South Florida, Department of Molecular Pharmacology and Physiology

**Title:** *“Gut Microbial-derived Phenylacetylglutamine Accumulation Leads to Cardiovascular Dysfunction”*

*International:*

2018 European Society of Cardiology, Frontiers of CardioVascular Biology – Vienna, Austria Uncoordinated signaling in diseased cardiomyocyte: potential role of beta 3 adrenergic receptors

**Title:** *“Beta3AR and ischemia–reperfusion”*

**COMMUNITY SERVICE, CIVIC DUTIES AND VOLUNTEER WORK:**

2018 – 2023 Member, St. Joseph’s Roman Catholic Church Choir, New Orleans, LA

2020 Habitat for Humanity Build – St. Tammy West, Pool Corp.

2021 – Present Member, Krewe of Thoth