

CURRICULUM VITAE
Yonggang Ma, Ph.D.

Date of Preparation: January 2018

I. GENERAL INFORMATION

A. Contact information

Office Address: Department of Physiology and Biophysics Room G362
University of Mississippi Medical Center
2500 North State Street, Jackson, MS, 39216

Phone: (601)815-1947

Email: yma@umc.edu

B. Education

YEAR	DEGREE	MAJOR	INSTITUTION/LOCATION
2007-2010	Ph.D.	Cardiovascular pharmacology	Peking Union Medical College, Beijing, China Dissertation Title: The role of therapeutic blockade of toll like receptor (TLR)-2 in ischemia- and doxorubicin-induced heart failure Dissertation Advisor: Zhuowei Hu, M.D., Ph.D.
2004-2007	Master	Neuropharmacology	Shanxi Medical University, Taiyuan, Shanxi, China Dissertation Title: The effect of pinellia total alkaloids on EcoG, CEP and mRNA expression of cerebral GABA and glutamic acid receptor in epileptic rats Dissertation Advisor: Mingzheng Wang, M.D.
1999-2002		Clinical Medicine	Shanxi Medical University, Taiyuan, Shanxi, China

C. Academic Appointments

2015-present	Assistant Professor	University of Mississippi Medical Center
2013-2014	Postdoctoral Fellowship	University of Mississippi Medical Center
2010-2013	Postdoctoral Fellowship	University of Texas Health Science Center at San Antonio

Research Field: Cardiac remodeling post-myocardial infarction and cardiac aging
Fellowship Advisor: Merry L. Lindsey, Ph.D.

D. Research

D1. Publications (peer reviewed, *corresponding author)

- Ma Y**, Mouton AJ, and Lindsey ML. Cardiac Macrophage Biology in the Steady State Heart, the Aging Heart, and Following Myocardial Infarction. *Translational Research*. 2018;191:15-28
- DeLeon-Pennell KY, Iyer RP, Ero OK, Cates CA, Flynn ER, Cannon PL, Jung M, Shannon D, Garrett MR, Buchanan W, Hall ME, **Ma Y**, and Lindsey ML. Periodontal-induced chronic inflammation triggers macrophage secretion of Ccl12 to inhibit fibroblast-mediated cardiac wound healing. *JCI Insight*. 2017;2(18)
- Jung M, **Ma Y**, Iyer RP, DeLeon-Pennell KY, Yabluchanskiy A, Garrett MR, and Lindsey ML. IL-10 Improves Cardiac Remodeling after Myocardial Infarction by Stimulating M2 Macrophage Polarization and Fibroblast Activation. *Basic Research in Cardiology*. 2017;112(3):33
- Ma Y**, Iyer RP, Jung M, Czubyrt MP, and Lindsey ML. Cardiac Fibroblast Activation Post-Myocardial Infarction: Current Knowledge Gaps. *Trends in Pharmacological Sciences*. 2017;38(5):448-458
- Lindsey ML, Hall ME, Harmancey R, and **Ma Y**. Adapting Extracellular Matrix Proteomics for Clinical Studies on Cardiac Remodeling Post-Myocardial Infarction. *Clinical Proteomics*. 2016;13:19
- Iyer RP, de Castro Brás LE, Cannon P, **Ma Y**, DeLeon-Pennell KY, Jung M, Flynn E, Henry J, Bratton D, White J, Fulton L, Grady A, and Lindsey ML. Defining the Sham Environment for Post Myocardial Infarction Studies in Mice. *American Journal of Physiology – Heart and Circulatory Physiology*. 2016;311(3):H822-36
- Halade GV and ***Ma Y**. Neutrophils: Friend, Foe, or Contextual Ally in Myocardial Healing. *Journal of Molecular and Cellular Cardiology*. 2016;97:44-46
- *Ma Y**, Yabluchanskiy A, Iyer RP, Cannon PL, Flynn ER, Jung M, Henry J, Cates CA, DeLeon-Pennell KY, Lindsey ML. Temporal Neutrophil Polarization Following Myocardial Infarction. *Cardiovasc Research*. 2016;110:51-61
- *Ma Y**. LRP5: A Novel Anti-Inflammatory Macrophage Marker that Positively Regulates Migration and Phagocytosis. *Journal of Molecular and Cellular Cardiology*. 2016;91:61-62. Accepted on first submission
- Lindsey ML, Iyer RP, Jung M, DeLeon-Pennell KY, and ***Ma Y**. Matrix Metalloproteinases As Input and Output Signals for Post-Myocardial Infarction Remodeling. *Journal of Molecular and Cellular Cardiology*. 2016;91:134-40.
- DeLeon-Pennell KY, Tian Y, Zhang B, Cates CA, Iyer RP, Cannon P, Shah P, Aiyetan P, Halade GV, **Ma Y**, Flynn E, Zhang Z, Jin YF, Zhang H, and Lindsey ML. CD36 Is A Matrix Metalloproteinase-9 Substrate That Stimulates

- Neutrophil Apoptosis and Removal During Cardiac Remodeling. *Circulation: Cardiovascular Genetics*. 2016 ;9(1):14-25.
12. Yabluchanskiy A, **Ma Y**, DeLeon-Pennell KY, Halade GV, Voorhees AP, Nguyen NT, Jin YF, and Winniford MD, Hall ME, Han HC, and Lindsey ML. Myocardial Infarction Superimposed on Aging: MMP-9 Deletion Promotes M2 Macrophage Polarization. *The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences*. 2016 ;71(4):475-483
 13. Lindsey ML, Yabluchanskiy A, and ***Ma Y**. Tissue Inhibitor of Metalloproteinase-1: Actions Beyond Matrix Metalloproteinase Inhibition. *Cardiology*. 2015;132(3):147-150. Accepted on first submission
 14. Voorhees AP, DeLeon-Pennell KY, **Ma Y**, Halade GV, Yabluchanskiy A, Iyer RP, Flynn E, Cate CA, Lindsey ML, and Han HC. Building a Better Infarct: Modulation of Collagen Cross-linking to Increase Infarct Stiffness and Reduce Left Ventricular Dilatation post-Myocardial Infarction. *Journal of Molecular and Cellular Cardiology*. 2015;85:229-239
 15. **Ma Y**, Chiao YA, Ghasemi O, Yabluchanskiy A, Zouein F, Lindsey ML, and Jin YF. Deriving a Cardiac Aging Signature to Reveal Matrix Metalloproteinase-9 Dependent Inflammatory Signaling in Senescence. *Cardiovascular Research*. 2015;106:421-431
 16. Yabluchanskiy A, **Ma Y**, and Lindsey ML. Syndecan-4: A Novel Regulator of Collagen Synthesis and Deposition in the Pressure-overloaded Myocardium. *Cardiovascular Research*. 2015;106:178-179
 17. Iyer RP, Patterson NL, Zouein FA, **Ma Y**, Dive V, de Castro Brás LE, and Lindsey ML. Early Matrix Metalloproteinase-12 Inhibition Worsens Post-myocardial Infarction Cardiac Dysfunction by Delaying Inflammation Resolution. *International Journal of Cardiology*. 2015;185:198-208
 18. ***Ma Y**. Neuron-derived Orphan Receptor 1: Working towards a Common Goal. *Journal of Molecular and Cellular Cardiology*. 2015;80:98-100. Accepted on first submission
 19. Tian Y, Koganti T, Yao Z, Cannon P, Shah P, Pietrovito L, Modesti A, Aiyetan P, DeLeon-Pennell K, **Ma Y**, Halade GV, Hicks C, Zhang H, and Lindsey ML. Cardiac Extracellular Proteome Profiling and Membrane Topology Analysis Using Glycoproteomics. *Proteomics Clinical Applications*. 2014;8(7-8):595-602
 20. **Ma Y**, Yabluchanskiy A, and Lindsey ML. Heavy Hitting: Using Water to Label Humans. *Proteomics-Clinical Applications*. 2014;8(7-8):477-479. Accepted on first submission
 21. de Castro Brás LE, Cate CA, DeLeon-Pennell KY, **Ma Y**, Iyer RP, Halade GV, Yabluchanskiy A, Fields GB, Weintraub ST, and Lindsey ML. Citrate Synthase is a Novel In Vivo Matrix Metalloproteinase-9 Substrate that Regulates Mitochondrial Function in the Post-Myocardial Infarction Left Ventricle. *Antioxidants & Redox Signaling*. 2014;21(14):1974-1985
 22. Yabluchanskiy A, **Ma Y**, and Lindsey ML. Matrix Metalloproteinase-9 Post Myocardial Infarction: Breakdowns and Breakthroughs. *Global Journal of Human Anatomy and Physiology Research*. 2014;1:6-9
 23. **Ma Y**, Yabluchanskiy A, Hall ME, and Lindsey ML. Using Plasma Matrix Metallproteinase-9 and Monocyte Chemoattractant Protein-1 to Predict Future Cardiovascular Events in Subject with Carotid Atherosclerosis. *Atherosclerosis*. 2014;232:231-233
 24. Ghasemi O, **Ma Y**, Lindsey ML, and Jin YF. Using Systems Biology Approaches to Understand Cardiac Inflammation and Extracellular Matrix Remodeling In the Setting of Myocardial Infarction. *Wiley Interdisciplinary Reviews: Systems Biology and Medicine*. 2014;6:77-91
 25. **Ma Y**, de Castro Brás L, Toba H, Iyer RP, Hall ME, Winniford MD, Lange RA, Tyagi SC, and Lindsey ML. Myofibroblasts and the Extracellular Matrix Network in Post-Myocardial Infarction Cardiac Remodeling. *Pflügers Archiv - European Journal of Physiology*. 2014;466(6):1113-1127. Accepted on first submission
 26. Yabluchanskiy A, **Ma Y**, Chiao YA, Lopez E, Voorhees A, Toba H, Hall ME, Han HC, Jin YF, and Lindsey ML. Cardiac Aging Is Initiated by Matrix Metalloproteinase-9 Mediated Endothelial Dysfunction. *American Journal of Physiology – Heart and Circulatory Physiology*. 2014;306(10):H1398-1407
 27. Pan H, Qin K, Guo Z, **Ma Y**, April C, Gao X, Andrews TG, Bokov A, Zhang J, Chen Y, Weintraub ST, Fan JB, Wang D, Hu Y, Aune GJ, Lindsey ML, and Li R. RNA Polymerase II Pausing Factor NELF Controls Energy Homeostasis in Cardiomyocytes. *Cell Reports*. 2014;pii:S2211-1247(14)00128-4
 28. Yabluchanskiy A, **Ma Y**, Iyer RP, Hall ME, and Lindsey ML. Matrix Metalloproteinase-9: Many Shades of Function. *Physiology Review*. 2013;28:391-403
 29. **Ma Y**, Yabluchanskiy A, and Lindsey ML. Thrombospondin-1: the Good, the Bad, and the Complicated. *Circulation Research*. 2013;113:1272-1274
 30. ***Ma Y** and Lindsey ML. Matrix Metalloproteinase-28: A Novel Regulator of Post-Myocardial Infarction Cardiac Remodeling. *Journal of Cardiology and Clinical Research*. 2013;1:2
 31. Halade GV, **Ma Y**, Ramirez TA, Zhang J, Dai Q, Hensler JG, Lopez, EF, Ghasemi O, Jin YF, and Lindsey ML. Reduced BDNF Attenuates Inflammation and Angiogenesis to Improve Survival and Cardiac Function Following Myocardial Infarction in Mice. *American Journal of Physiology – Heart and Circulatory Physiology*. 2013;305:H1830-1842
 32. ***Ma Y**, Yabluchanskiy A, and Lindsey ML. Neutrophil Roles in Left Ventricular Remodeling Following Myocardial Infarction. *Fibrogenesis and Tissue Repair*. 2013;6(1):11

33. Heaberlin JR, **Ma Y**, Zhang J, Ahuja SS, Lindsey ML, and Halade GV. Obese and Diabetic KKAY Mice Show Increased Mortality but Reduced Ventricular Dysfunction Following Myocardial Infarction. *Cardiovascular Pathology*. 2013;22:481-487
34. de Castro Brás LE, Ramirez, TA, DeLeon KY, Chiao YA, **Ma Y**, Dai Q, Halade GV, Hakala KW, Weintraub, SE, and Lindsey ML. Texas 3-step Decellularization Protocol: Looking at the Cardiac Extracellular Matrix. *Journal of Proteomics*. 2013;86:43-52
35. **Ma Y**, Halade GV, Zhang J, Ramirez TA, Levin D, Voorhees A, Manicone AM, Jin YF, Han HC, and Lindsey ML. Matrix Metalloproteinase-28 Deletion Exacerbates Cardiac Dysfunction and Rupture Following Myocardial Infarction in Mice by Inhibiting M2 Macrophage Activation. *Circulation Research*. 2013;112(4):675-688
36. **Ma Y**, Zhang X, Bao H, Yu S, Hu Z, and Sun W. Blocking Extracellular HMGB1 Activity Protects against Doxorubicin Induced Cardiac Injury in Mice. *Yaouxuebao*. 2012; 47(11):1489-1495
37. **Ma Y**, Lindsey ML, and Halade GV. DHA Derivatives of Fish Oil as Dietary Supplements: A Nutritional-Based Drug Discovery Approach for Therapies to Prevent Metabolic Cardiotoxicity. *Expert Opinion On Drug Discovery*. 2012;7(8):711-721
38. **Ma Y**, Halade GV, and Lindsey ML. Extracellular Matrix and Fibroblast Communication Following Myocardial Infarction. *The Journal of Cardiovascular Translational Research*. 2012;5(6):848-857
39. **Ma Y**, Yabluchanskiy A, Lindsey ML, and Chilton RJ. Is Isolated Systolic Hypertension Worse Than Combined Systolic/Diastolic Hypertension? *The Journal of Clinical Hypertension*. 2012;14(11):808-809
40. Wang Y, Yang T, **Ma Y**, Halade GV, Zhang J, Lindsey ML, and Jin YF. Mathematical modeling and stability analysis of macrophage activation in left ventricular remodeling post-myocardial infarction. *BMC Genomics*. 2012;13 Suppl 6: S21
41. **Ma Y**, Chilton RJ, and Lindsey ML. Heart Rate Reduction: An Old and Novel Candidate Heart Failure Therapy. *Hypertension*. 2012;59:908-910
42. de Castro Brás LE, DeLeon KY, **Ma Y**, Dai Q, Hakala K, Weintraub ST, and Lindsey ML. Plasma Fractionation Enriches Post-Myocardial Infarction Samples Prior to Proteomics Analysis. *International Journal of Proteomics*. 2012;2012:1-8
43. **Ma Y**, Zhang X, Bao H, Mi S, Cai W, Yan H, Wang Q, Wang Z, Yan J, Fan G, Lindsey ML, and Hu Z. Toll Like Receptor (TLR) 2 and TLR4 Differentially Regulate Doxorubicin Induced Cardiomyopathy in Mice. *PLoS ONE*. 2012;7:e40763
44. **Ma Y**, Chiao YA, Zhang J, Manicone AM, Jin YF, and Lindsey ML. Matrix Metalloproteinase-28 Deletion Amplifies Inflammatory and Extracellular Matrix Responses to Cardiac Aging. *Microscopy and Microanalysis*. 2012;18:1-10
45. Mi S, Li Z, Yang HZ, Liu H, Wang JP, **Ma Y**, Wang XX, Liu HZ, Sun W, and Hu ZW. Blocking IL-17a Promotes the Resolution of Pulmonary Inflammation and Fibrosis via TGF-beta1-Dependent and -Independent Mechanisms. *Journal of Immunology*. 2011;187:3003-3014
46. Wang QQ, Yang HZ, Liu HZ, Mi S, Zhang XW, Yan HM, **Ma Y**, Wang XX, and Hu ZW. Interleukin-17A Is Involved in Development of Spontaneous Pulmonary Emphysema Caused by Toll-like Receptor 4 Mutation. *Acta Pharmacologica Sinica*. 2011;32:1045-54
47. Cai WF, Zhang XW, Yan HM, **Ma Y**, Wang XX, Yan J, Xin BM, Lv XX, Wang QQ, Wang ZY, Yang HZ, and Hu ZW. Intracellular or Extracellular Heat Shock Protein 70 Differentially Regulates Cardiac Remodeling in Pressure Overload Mice. *Cardiovascular Research*. 2010;88:140-149
48. Niu X, **Ma Y**, Wang M, Yang L, Chen J, Zhang Q, and Wang H. The Effects of Carbamazepine on GABA_A Receptor mRNA Expression in Brain of Convulsant Rats Kindled by Penicillin. *Chinese Pharmacological Bulletin*. 2008;24(1):128-132
49. Chen J, Yang R, Wang M, Cheng Y, He X, **Ma Y**, Yang L, and He Q. Anticonvulsive Action of Pinellia Pedatisecta Schott Extract Prepared by ethanol-modified Supercritical CO₂ Extraction. *Chinese Journal of Pharmacology and Toxicology*. 2007;21(6):449-454

D2. Abstracts (peer reviewed, *corresponding author)

1. Jung M, **Ma Y**, Yabluchanskiy A, Iyer RP, Garrett MR, DeLeon-Pennell KY, and Lindsey ML. IL-10 regulates inflammation to improve LV physiology after myocardial infarction by stimulating M2 macrophage polarization and fibroblast activation. 2017 AHA Council of Basic Cardiovascular Science, Portland, USA
2. Lindsey ML, Jung M, Yabluchanskiy A, Cannon-Stewart PL, Iyer RP, Flynn ER, DeLeon-Pennell KY, and ***Ma Y**. CXCL4 Aggravates Cardiac Dilation and Mortality after Myocardial Infarction by Inducing Pro-inflammatory M1 Macrophages and Inhibiting Macrophage Phagocytosis. *FASEB J* April 2017 31:1079.4
3. Jung M, **Ma Y**, Yabluchanskiy A, Lindsey ML. IL-10 Improves Cardiac Remodeling Post-Myocardial Infarction by Increasing M2 Macrophage Polarization to Improve Scar Formation. *FASEB J* April 2017 31:875.2
4. Iyer RP, Flynn ER, **Ma Y**, and Lindsey ML. Proteomic Analysis Identifies Matrix Metalloproteinase-9 and -12 Regulated Apoptosis Substrates in the Post-Myocardial Infarction Left Ventricle. *FASEB J* April 2017 31:694.6
5. Jung M, **Ma Y**, Yabluchanskiy A, Lindsey ML. IL-10 Improves Cardiac Remodeling Post-Myocardial Infarction by Stimulating M2 Macrophage Polarization and Fibroblast Activation. *KSMCB*. 2016, Coex, Seoul, Korea.

6. Lindsey ML, Cannon PL, Flynn ER, DeLeon-Pennell KY, Iyer RP, Jung M, and ***Ma Y**. Matrix Metalloproteinase-28 Roles Beyond Extracellular Matrix Degradation. International Conference of Physiological Sciences. 2016, Beijing, China
7. Lindsey ML, Cannon PL, Flynn ER, Jung M, Iyer RP, DeLeon-Pennell KY, and ***Ma Y**. Matrix Metalloproteinase (MMP)-28 Activates Signal Transducer and Activator of Transcription 1 to Induce Macrophage M1 Polarization. *FASEB J* April 2016 30:160.3
8. Jung M, **Ma Y**, Yabluchanskiy A, Lindsey ML. IL-10 Polarizes Macrophages in vivo to an Anti-inflammatory Phenotype to Improve Cardiac Remodeling Post-Myocardial Infarction; Session Track: Extracellular Matrix/Cardiac Remodeling. *FASEB J* April 2016 30:1205.3
9. DeLeon-Pennell KY, Iyer RP, **Ma Y**, Yabluchanskiy A, and Lindsey ML. Decreased Interleukin-6 Signaling in Female Mice Early Post-Myocardial Infarction Attenuates Neutrophil Infiltration and Limits Cardiac Dilatation and Rupture. *FASEB J* April 2016 30:1205.1
10. Iyer RP, de Castro Brás LE, M Jung, **Ma Y**, DeLeon-Pennell KY, Flynn ER, Cannon PL, Cates CA, and Lindsey ML. Matrix Metalloproteinase-12 Reduces Cardiac Dilatation Post-Myocardial Infarction by Decreasing Neutrophil Accumulation. *FASEB J* April 2016 30:1210.5
11. **Ma Y**, DeCoux A, Yabluchanskiy A, Clark R, Jin YF, and Lindsey ML. Neutrophil Polarization Following Myocardial Infarction in Mice. *Experimental Biology*. *FASEB J* April 2015 29:801.4
12. **Ma Y**, Yabluchanskiy A, Clark R, Cannon PL, Flynn ER, Jin YF, and Lindsey ML. CXCL4 Aggravates Mortality and Left Ventricular Dilatation Following Myocardial Infarction by Polarizing Macrophages to a Pro-inflammatory M1 Phenotype. *Circulation*. 2014;130(Suppl_2):p. A14885
13. Yabluchanskiy A, **Ma Y**, Bratton D, Chiao YA, Voorhees A, Han HC, Jin YF, and Lindsey ML. What's the Best Age for Mice to Have Myocardial Infarction: Modulating Matrix Metalloproteinase-9 to Answer the Question. *Circulation*. 2014;130(Suppl_2):p. A13984
14. Yabluchanskiy A, **Ma Y**, DeLeon-Pennell K.Y., Jin Y-F, Lindsey ML. Matrix metalloproteinase-9 deletion shifts macrophage polarization towards M2 phenotype in aged left ventricles post-myocardial infarction. *Cardiovascular Research* (2014) 103 (Suppl. 1), S6. *Frontiers in Cardiovascular Biology* 2014, Barcelona, Spain. July 2014
15. Tian Y, DeLeon-Pennell K, Zhang B, Cannon P, Shah P, Aiyetan P, Halade GV, **Ma Y**, Zhang Z, Zhang H, Lindsey ML. In Vivo Substrates of MMP-9 in the Post-MI Left Ventricle. *NHLBI Joint Metabolomics/Proteomics Workshop, Data Extraction, Integration, and Translation to Knowledge*. June, 2014, Baltimore, MD.
16. Tian Y, DeLeon-Pennell K, Zhang B, Cannon P, Shah P, Aiyetan P, Halade GV, **Ma Y**, Zhang Z, Zhang H, Lindsey ML. MMP-9 Associated Extracellular Proteins Identified in the Left Ventricle Infarct Using Glycoproteomics. *American Society for Mass Spectrometry (ASMS)*, Baltimore, MD. June 2014
17. Yabluchanskiy A, **Ma Y**, Chiao YA, Voorhees A, Han HC, Jin YF, and Lindsey ML. MMP-9 Deletion Improves Vascular Permeability and Angiogenesis in Aging Mice. *FASEB J* April 2014 28:880.8
18. de Castro Brás L, DeLeon-Pennell KY, **Ma Y**, Yabluchanskiy A, Iyer RP, Fields G, and Lindsey ML. Collagen C-Peptide Roles in Post-Myocardial Infarction Remodeling. *FASEB J* April 2014 28:867.15
19. **Ma Y**, Chiao YA, Ghasemi O, Lindsey ML, and Jin YF. Matrix Metalloproteinase-9 Deletion Alters the Age-associated Inflammation Profile by Upregulating M2 Macrophage Polarization. *Circulation*. 2013;128:A16783
20. de Castro Brás L, DeLeon-Pennell KY, Bratton DR, **Ma Y**, Yabluchanskiy A, Halade GV, and Lindsey ML. Matrix Metalloproteinase-9 Stimulated Osteopontin Proteolysis Enhances the Extracellular Matrix Response Post Myocardial Infarction. *Circulation*. 2013;128:A15262
21. Yabluchanskiy A, **Ma Y**, Chiao YA, Bratton DR, Jin YF, and Lindsey ML. Matrix Metalloproteinase-9 Deletion Blunts Inflammation and Facilitates Scar Formation Post-Myocardial Infarction in the Aging Left Ventricle. *Circulation*. 2013 ;128:A15285
22. Heaberlin J, **Ma Y**, Zhang J, Ahuja SS, Lindsey ML, and Halade GV. KKAy mice show decreased survival but reduced ventricular dysfunction following myocardial infarction. 2013 American Geriatrics Society (AGS) Annual Scientific Meeting, Grapevine, TX (May 2013).
23. de Castro Brás L, DeLeon KY, Bratton DR, Yabluchanskiy A, **Ma Y**, Halade GV, Halaka K, Weintraub ST, and Lindsey ML. MMP-9 Dependent Proteins Regulate Left Ventricular Remodeling Following Myocardial Infarction. *FASEB J* April 9, 2013 27:1129.4
24. Halade GV, **Ma Y**, Ramirez TA, Zhang J, Dai Q, Hensler JG, Lopez EF, Ghasemi O, Jin YF, and Lindsey ML. Reduced BDNF Attenuates Inflammation and Angiogenesis to Improve Survival and Cardiac Function Following Myocardial Infarction in Mice. *FASEB J* April 9, 2013 27:1085.6
25. Yabluchanskiy A, **Ma Y**, Chiao YA, Lopez E, Zhang J, Jin YF, and Lindsey ML. MMP-9 Dependent Early Biomarkers of Cardiac Aging. *FASEB J* April 9, 2013 27:1194.5
26. **Ma Y**, Yabluchanskiy A, Zhang J, Ramirez TA, Manicone AM, and Lindsey ML. Matrix Metalloproteinase-28 Deletion Attenuates Early Cardiac Dysfunction Following Myocardial Infarction by Restraining Neutrophil Infiltration and Limiting the Inflammatory Response. *FASEB J* April 9, 2013 27:386.12

27. Halade GV, **Ma Y**, Ramirez TA, Zhang J, Dai Q, Hensler JG, Lopez EF, Ghasemi O, Jin YF, and Lindsey ML. Reduced BDNF Attenuates Early Inflammation and Improves Long-term Survival Following Myocardial Infarction in Mice. *Circulation*. 2012;126:A12452
28. **Ma Y**, Halade GV, Zhang J, Ramirez TA, Voorhees A, Manicone AM, Jin YF, Han HC, and Lindsey ML. Matrix Metalloproteinase-28 Deletion Exacerbates Cardiac Dysfunction and Rupture Following Myocardial Infarction in Mice. *Circulation*. 2012;126:A15381
29. Voorhees A, **Ma Y**, DeLeon KY, Halade GV, Lindsey ML, and Han HC. Failure Strength of the Infarcted Left Ventricle in Matrix Metalloproteinase-28 Null Mice. BMES Annual Meeting, Atlanta, GA, October 24-27, 2012
30. de Castro Brás LE, DeLeon KY, **Ma Y**, Dai Q, Hakala K, Weintraub ST, and Lindsey ML. "Proteomic Analysis of Fractionated Plasma Identifies Alpha-2 Macroglobulin as an MMP-9 Dependent Marker Post-Myocardial Infarction". 9th Siena Meeting – From Genome to Proteome 2012, Siena, Italy (August 2012).
31. **Ma Y**, Halade GV, Zhang J, Ramirez TA, Voorhees A, Manicone AM, Jin YF, Han HC, and Lindsey ML. Matrix Metalloproteinase-28 Deletion Aggravates Left Ventricular Dysfunction and Rupture Post-Myocardial Infarction in Mice. World Congress on Medical Physics and Biomedical Engineering, Beijing, China, May 2012
32. de Castro Brás L, DeLeon KY, Dai Q, **Ma Y**, Halade GV, Hakala K, Weintraub ST, and Lindsey ML. Proteomic Profiling of Fractionated Post-myocardial Infarction Plasma Identifies MMP-9 Dependent Markers. 60th ASMS Conference on Mass Spectrometry, Vancouver, Canada, May 2012
33. **Ma Y**, Zhang J, Ramirez TA, Manicone AM, and Lindsey ML. Matrix Metalloproteinase-28 Deletion Attenuates Short-term Left Ventricular Dysfunction but Exacerbates Cardiac Rupture Post-Myocardial Infarction in Mice. *FASEB J* March 29, 2012 26:1060.1. Selected for both oral & poster presentation in the Featured Topics named "Communication between Cardiac Cells and the Extracellular Matrix"
34. Wang Y, **Ma Y**, Halade G, Lindsey ML, and Jin Y-F. Mathematical modeling of macrophage activation post myocardial infarction. IEEE GENSIPS 2011, San Antonio, TX (2011).
35. **Ma Y**, Zhang J, Manicone AM, and Lindsey ML. Matrix Metalloproteinase-28 Deletion Preserves Cardiac Function Following Myocardial Infarction in Mice. *Circulation*. 2011;124:A14526
36. Yan H, **Ma Y**, Mi S, Cui B, Zhang X, Cai W, Lv X, Wang Q, Yan J, Xin B, Wang X, Wang Z, Li Y, Yang H, and Hu Z. Regression of Abdominal Aortic Aneurysms by Targeting Toll-Like Receptor 2. *Circulation*. 2008;118: S_303-S_304

D3. Books or chapters (peer reviewed)

1. **Ma Y**, Iyer RP, de Castro Brás L, Toba H, Yabluchanskiy A, DeLeon-Pennell KY, Hall ME, Lange RA, and Lindsey ML. Crosstalk between Inflammation and Extracellular Matrix Following Myocardial Infarction. Book chapter in "Inflammation in Heart Failure", W. Matthijs Blankesteyn and Raffaele Altara, Editors. 2014:67-79
2. Zamilpa R, Zhang J, Chiao YA, de Castro Bras L, Halade G, **Ma Y**, Hacker SO, and Lindsey ML. Cardiac Wound Healing Post-Myocardial Infarction: A Novel Method to Target Extracellular Matrix Remodeling in the Left Ventricle. Book chapter in "Wound Regeneration and Repair: Methods and Protocols", Tereance Myers and Robert G. Gourdie, Editors. *Methods in Molecular Biology*. 2013;1037:313-324
3. DeLeon KY, de Castro Brás LE, **Ma Y**, Halade G, and Lindsey ML. Extracellular Matrix Biomarkers of Adverse Remodeling after Myocardial Infarction. In *Cardiac Remodeling*; Bodh I. Jugdutt and Naranjan S. Dhalla, Eds.; Springer, 2012:383-412

E. Current Research Support

Source: AHA 15SDG22930009
 Title: Neutrophil Polarization in Post Myocardial Infarction Cardiac Remodeling
 Period: 1/1/2015-12/31/2018
 Total funding: \$308,000
 Role: Principal Investigator
 Score/Percentile rank: 1.15/0.91%

Source: NIH/NIGMS_COBRE Pilot Project
 Title: Novel Roles of MMP-28 Post-Myocardial Infarction
 Period: 4/1/2017-3/31/2018
 Total funding: \$40,000
 Role: Principal Investigator

F. Academic and Professional Activities

F1. Membership

- American Heart Association, Council on Functional Genomics and Translational Biology
- American Physiology Society, Cardiovascular Section

- American Society for Investigative Pathology

F2. Grant reviewing

- 2015 Spring American Heart Association
- 2017 Spring American Heart Association
- 2017 UMMC Intramural Research Support Program

F3. Invited Manuscript Reviewer or Editorial Board

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|--|----------|
| • AJP-Heart and Circulatory Physiology | Reviewer |
| • AJP-Regulatory, Integrative and Comparative Physiology | Reviewer |
| • Biomedical Chromatography | Reviewer |
| • BMC Genomics | Reviewer |
| • Clinical Science | Reviewer |
| • Comprehensive Physiology | Reviewer |
| • Heart and Vessels | Reviewer |
| • Inflammatory Research | Reviewer |
| • IJC Metabolic & Endocrine | Reviewer |
| • International Journal of Clinical Cardiology | Reviewer |
| • Journal of Diabetes and Its Complications | Reviewer |
| • Journal of Molecular and Cellular Cardiology | Reviewer |
| • Journal of Physiology and Pharmacology | Reviewer |
| • Journal of Visualized Experiments | Reviewer |
| • Korean Circulation Journal | Reviewer |
| • Lipids in Health and Disease | Reviewer |
| • Medical Science Monitor | Reviewer |
| • Proteomics Clinical Applications | Reviewer |
| • Science China Life Sciences | Reviewer |
| • Cellular Physiology and Biochemistry | Reviewer |
| • Acta Biomaterialia | Reviewer |
| • Cardiovascular & Hematological Disorders-Drug Targets | Reviewer |
| • Biomedicine and Biotechnology | Reviewer |
| • International Journal of Molecular Sciences | Reviewer |

F4. Committee

- APS CV Section Award Committee

F5. Selected Oral Presentations

- 2017 Experimental Biology, Chicago, IL
- 2016 Shanxi Medical University, Taiyuan, Shanxi, China
- 2016 International Conference of Physiological Sciences, Beijing, China
- 2016 Experimental Biology, San Diego, CA
- 2015 University of Louisville Division of Cardiovascular Medicine
- 2015 Experimental Biology, Boston, MA
- 2014 Department of Physiology and Biophysics Seminar at UMMC
- 2013 CRRC Seminar at UMMC
- 2013 Experimental Biology, Boston, MA
- 2012 World Congress on Medical Physics and Biomedical Engineering, Beijing, China
- 2012 Experimental Biology, San Diego, CA

F6. Sessions or Seminars Moderated

- 2014 Department of Physiology and Biophysics Seminar at UMMC
- May 2012 Co-chair Cardiovascular-Respiratory Biomechanics Session in World Congress on Medical Physics and Biomedical Engineering, Beijing, China

F7. Community Activities

- April 2017 Judging the Undergraduate Research Awards at Experimental Biology Conference
- April 3rd 2014 Judged Junior Project Job Shadowing Presentations at Pearl High School
- Spring 2014 Mentoring Madison Central High School Students for 2014 Discovery U High School Program

- 2012-present Physiology Understanding (PhUn) Week
- July 2012 Mentor for a Girl Scouts troop when they visited the lab as "Scientist for a Day"
- 2010-2014 American Heart Association Heart Walk

G. Honors and Awards

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|--------|--|---------------------------------------|
| • 2016 | American Society for Investigative Pathology | Junior Faculty Award |
| • 2015 | American Physiological Society | CV Section Research Recognition Award |
| • 2012 | American Heart Association | AHA FGTB Abstract Travel Award |
| • 2009 | Institute of Materia Medica, PUMC | Excellent Graduate Student Award |
| • 2001 | Shanxi Medical University | Merit Student Award |
| • 2000 | Shanxi Medical University | Excellent College Student Award |

II. TEACHING and SUPERVISION

A. Teaching Experience

- Fall 2016 How to read echocardiography for graduate students in Physiology Department
- August 2012 How to isolate neutrophils, macrophages, and (myo)fibroblast from mouse infarcted hearts
- August 2012 How to analyze survival rate using Kaplan-Meier survival analysis
- April 2012 Cardiac rupture phenotype post-myocardial infarction
- 2005-2006 Experimental Pharmacology for undergraduate students

B. Fellows, Students and Technicians Supervised

- June 2017- Alan J. Mouton
- Summer 2016 Destiny Mitchell
- 2014-2015 Andriy Yabluchanskiy
- 2014-2015 Yuan Tian
- Summer 2014 Jason Engel & Victoria Wolf
- 2013- 2015 Ryan Clark
- May-July 2012 Daniel Levin