

CURRICULUM VITAE
Merry L. Lindsey, Ph.D.

Date of Preparation: December 2018

I. GENERAL INFORMATION

A. Personal Data:

Citizenship Status: US Citizen Place of Birth: Stuart, FL
Office Address: University of Mississippi Medical Center
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B. Education:

1988-1992 Bachelor of Arts in Biology (Chemistry and English Minors), Boston University, Boston, MA
1994-1999 Ph.D. in Cardiovascular Sciences, Baylor College of Medicine, Houston, TX
Dissertation Title: MMP 9 Expression and Activation Following Myocardial Ischemia/Reperfusion
Dissertation Advisor: Mark L. Entman, M.D.

C. Postgraduate Training:

1999-2002 Postdoctoral Fellowship, Harvard Medical School and Brigham and Women's Hospital Boston, MA;
Fellowship Advisor: Richard T. Lee, M.D. (Supported in part by an NRSA postdoctoral fellowship)

D. Academic Appointments:

2013-present Research Health Scientist, Research Service, G.V. (Sonny) Montgomery Veterans Affairs Medical Center, Jackson, MS

2013-present Professor and Director, Mississippi Center for Heart Research, Department of Physiology and Biophysics, University of Mississippi Medical Center, Jackson, MS (tenured effective 7/1/2015)

2013-present Full Member, School of Graduate Studies, University of Mississippi Medical Center, Jackson, MS

2013-2014 Member, Graduate Faculty, Department of Agricultural and Biological Engineering, Mississippi State University, Starkville, MS

2012-2013 Professor with Tenure, Department of Medicine, Division of Geriatrics, Gerontology and Palliative Medicine Division (primary appointment), and Department of Cellular and Structural Biology (cross-appointment), The University of Texas Health Science Center at San Antonio.

2010-2012 Associate Professor with Tenure, Department of Medicine, Division of Geriatrics, Gerontology and Palliative Medicine Division (primary appointment), and Department of Cellular and Structural Biology (cross-appointment), The University of Texas Health Science Center at San Antonio.

2010-2012 Research Health Scientist, South Texas Veterans Health Care System, San Antonio, TX

2009-2010 Associate Professor with Tenure, Department of Medicine, Cardiology Division (primary appointment), and Department of Cellular and Structural Biology (cross-appointment), The University of Texas Health Science Center at San Antonio

2009-2010 Interim Assistant Dean for Medical Student Research Programs, School of Medicine, The University of Texas Health Science Center at San Antonio

2005-2013 Graduate Faculty Member, Cell and Structural Biology, Biochemistry, Biomedical Engineering, and Physiology Graduate Programs, The Graduate School of Biomedical Sciences, The University of Texas Health Science Center at San Antonio

2005-2013 Faculty Member, The Sam and Ann Barshop Center for Longevity and Aging Studies, The University of Texas Health Science Center at San Antonio

2005-2009 Assistant Professor (Tenure-Track), Department of Medicine, Cardiology Division (primary appointment); Department of Cellular and Structural Biology (cross-appointment), The University of Texas Health Science Center at San Antonio

2004-2007 Member (2004-2007) and Associate Member (2002-2004), Graduate Faculty, College of Graduate Studies, Program in Molecular and Cellular Biology and Pathobiology, MUSC

2003-2005 Assistant Professor (Tenure-Track), Department of Cell and Molecular Pharmacology and Experimental Therapeutics (dual appointment), Medical University of South Carolina

2002-2005 Assistant Professor (Tenure-Track), Department of Surgery, Medical University of South Carolina

E. Other Employment:

1992- 1994 Research Technician II, Department of Molecular Physiology and Biophysics, Baylor College of Medicine, Houston, TX. Arthur M. Brown, M.D., Ph.D., supervisor

F. Honors and Awards:

1. 1999 Cover Photo Contest Winner, The Graduate School of Biomedical Sciences Graduate Student Symposium, Baylor College of Medicine.
2. 1999 Finalist for the North American Vascular Biology Organization (NAVBO) young investigator award, Federation of American Societies for Experimental Biology meeting, Washington, D.C. "PMNs are the early source of MMP 9 following myocardial I/R injury."
3. 2001 Trainee Abstract Award, Council on Basic Cardiovascular Sciences, American Heart Association Meeting, Anaheim, CA. "Selective MMP Inhibition Stimulates Angiogenesis and Reduces LV Remodeling Post MI in Rabbits."
4. 2005 Undergraduate Mentor Award, Winthrop University College of Arts and Sciences.
5. 2006 Leadership Education And Development (LEAD) Institute. Was 1 of 24 selected for the 2nd class; the goal was to provide future leaders with the insight, practical experiences and the tools to build on their leadership skills and to be successful.
6. National Doctors' Day Community Outreach Award, UTHSCSA 2009
7. 2010 Leading Light Award, for exemplary leadership and outstanding achievement in healthcare, Healthcare Businesswomen's Association, San Antonio Chapter.
8. IUPS 2013 Congress Travel Award
9. Silver Level Excellence in Research Medallion Award, UMMC 2013
10. Distinguished Service Award, American Physiological Society, Translational Physiology Interest Group, Experimental Biology 2014 (inaugural recipient; only 1 award was given)
11. Gold Level Excellence in Research Medallion Award, UMMC 2014
12. Translational Research Team Award, Excellence in Research Awards Ceremony, UMMC 2015- Dr. Michael Hall and Dr. Lindsey were selected as the most outstanding translational research team of the year.
13. tiny Heart Hero Award, Saving tiny Hearts Society 2016
14. Platinum Level Excellence in Research Medallion Award, UMMC 2016
15. Innovation Award, UMMC chapter of the Group on Women in Medicine and Science (GWIMS), 2017
16. 2018 Bodil M. Schmidt-Nielsen Distinguished Mentor and Scientist Award, American Physiology Society

Awards for research excellence by trainees supervised (a selection of examples):

1. Danielle K. Goshorn, technician. 2004 Finalist for the Scientific Sessions Poster Competition in Basic Science, American Heart Association Meeting, New Orleans, LA.
2. W. Chase Corn, M.D. student. 2004 Finalist for the poster competition, Student Research Day, Medical University of South Carolina.
3. Joseph T. Mingoia, M.D. student. 2005 South Carolina Medical Association Foundation Research Essay Scholarship Winner (\$2000 scholarship award)
4. C. Russell Horres III, high school student. 2006 Fifth Place in the Oral Presentation Competition in the Biochemistry category (\$50 prize), South Carolina Junior Academy of Science Annual Meeting in Columbia, SC.
5. Elizabeth Lopez, high school student. Based on her achievements, we applied for and successfully obtained a research supplement to my R01 for her to work in my laboratory for the summers of 2007 and 2008. Based on her summer 2007 work, she also won several science fair awards for the 2007-2008 school year.
6. Sarah McCurdy, biology major at St. Mary's University. 2008 1st place for the Science, Engineering, and Technology category at the St. Mary's 2008 Research Symposium. Selected 1 of 24 undergraduates awarded the American Physiological Society Undergraduate Summer Research Fellowship. Her abstract was 1 of 6 abstracts from 113 selected for oral presentation for the Department of Medicine Research Day (May 13, 2008). She was awarded 1st place for her category: Resident/Medical Student (she was the only undergraduate). 2009 Finalist for the APS Bruce Award, EB.
7. Rogelio Zamilpa, PhD- Postdoctoral Fellow. 2009 AHA postdoctoral grant funded on 1st submission.
8. Ying Ann Chiao, PhD student. 2009-10 Translational Science Training Scholar, UTHSCSA. Young Investigator Award, Oral Presentation (1st Prize), Thirteen Annual Scientific Meeting of Institute of Cardiovascular Science and Medicine. 2011 Cardiovascular Section Research Recognition Award recipient by the American Physiology Society (9 of 116 applicants received an award). Research Day Award (post-doctoral fellows/graduate student category) at the 14th Annual Medicine Research Day, UTHSCSA. Paul Horowitz Award for the best Biochemistry graduate student. Joe H. Ward, Jr. and Bettie B. Ward Award for Excellence in the Study of the Biology of Aging in recognition of outstanding achievements in aging research as a graduate student. Finalist for the FGTB Young Investigator Award, AHA (only graduate student finalist).
9. Ganesh Halade, PhD, pre-faculty fellow. 2010 Sole recipient of the Barbara H. Bowman Award from UT Health Science Center San Antonio as the most outstanding Postdoctoral Fellow. 2011 Awarded a K99/R00 from NCCAM for "DHA Mechanisms in Obesity-mediated cardiac remodeling post-myocardial infarction." This application was funded on first submission and was the only K99 funded by NCCAM in FY 2011. 2012 Sukhir Gupta Young Scientist Award from the Association of Scientists of Indian Origin (ASIOA).

10. Trevi Ramirez, BA- technician (was accepted into MD/PhD program at UTHSCSA). 2012 First place, Student category, Department of Medicine Research Day poster competition.
11. Yonggang Ma, PhD- pre-faculty fellow. 2012 FGTB Abstract Travel Award from AHA; 2015 Cardiovascular Section Research Recognition Award recipient by the American Physiology Society (9 of 104 applicants received an award).
12. Kristine DeLeon-Pennell, PhD- pre-faculty fellow. 2013 APS Minority Travel Fellowship Award for EB. 2013 Won Poster Award for Research Day, Fellows Category, UMMC. 2013 FGTB Minority Travel Grant for AHA Scientific Sessions. 2014 APS K-12 minority outreach fellowship to help mentor underrepresented students and get them in the pipeline. 2014 Steven M. Horvath Professional Opportunity Award (was 1 of 39 selected from 145 applications). 2014 one of 3 postdoctoral fellows chosen to attend the ASBMB Mentoring Workshop for Early Career Scientists. 2015 semi-finalist, Burroughs Wellcome Fund Career Award at the Scientific Interface. 2016 Trustmark Postdoctoral Publication Award (single cutting edge publication); 2017 Emerging Star Award, UMMC GWIMS
13. Lisandra de Castro Brás, PhD- pre-faculty fellow. 2013 BCVS Abstract Travel Grant for AHA Scientific Sessions.
14. Rugmani Padmanabhan Iyer, PhD- postdoctoral fellow. 2014 Hearing's Scholarship for the Millsaps Business Advantage Program, Else School of Management, Millsaps College (only one awarded); Basic Cardiovascular Sciences Scientific Sessions Travel Award (American Heart Association); 2015 Keystone Symposia Future of the Science Fund Scholarship; Trustmark Postdoctoral Publication Award (single cutting edge publication)
15. Mira Jung, PhD- postdoctoral fellow. 2016 Excellent Poster Award at the International Conference of the Korean Society for Molecular & Cellular Biology (Oct 12-14 in Seoul); 2016 UMMC Graduate School Research Day Best Poster Award.
16. Alan Mouton, PhD- pre-faculty fellow. 2018 Caroline tum Suden/Francis A. Hellebrandt Professional Opportunity Award; 2018 First place, Department of Medicine Research Day poster competition. 2018- American Heart Association Postdoctoral Fellowship awarded on 1st submission.

II. TEACHING

A. Classroom/Laboratory: (reverse chronological order)

Year(s)	Course Title	School	Hours	Role
	Evaluation score: Avg±SD; scale: 1=best; 5=worst			
2018	MCCTR Mentoring Academy		3.0	Facilitator
	Addressing equity and inclusion and Fostering Independence topics (Jan & Nov 2018)			
2017	MSCI 721 Biomarkers, Bioimaging, and Bioinformatics		3.0	Co-Director
2017, 2018	MSCI 790 Grant and Scientific Communication- peer review		2.0	Instructor
2016	Proteomics, Mass Spectrometry, DNA microarrays, Protein Arrays and Analysis		2.0	Instructor
	Physiological Applications of Molecular Biology			
2015	Molecular Basis of Cardiovascular Disease		1.5	Guest Instructor
	Molecular and Cellular Biology and Pathobiology Program, MUSC			
2014-present	Writing and Reviewing for Scientific Journals		21	Instructor
	APS Professional Skills Training			
	2014 Online Course- taught entire course			
	2015-16, 18, 19 Onsite Course- was one of 4-7 instructors			
2014	K-Award Writer Series		1.5	Lecturer
	Writing K Grants: the abstract			
2013	Responsible Conduct of Research		1	Lecturer
	Collaborative Research-gave the same lecture to 2 sets of about 20 trainees for each lecture			
2015-8	GRAD717 Circulatory Physiology		2	Lecturer
	Cardiac Pathophysiology			
2014-2017	Grant Writing		2	Lecturer
	Scientific Communications- Spring 2014, Fall 2016, Fall 2017			

2013	CV Physiology: Aging and MI Evaluation score: 1.22±0.29 (n=10)		2	Lecturer
2011	MEDI5075 Scientific Communication Social Networking to Promote Your Science		1.5	Lecturer
2009-2010	INTD 5081 Topics in Cardiovascular Research	Graduate School	1.5	Team Teacher
2008-2010	CSBL 6090 Seminar; chaired the weekly journal club for the Department of Cellular and Structural Biology	Graduate School	1	Chair
2008-2012	BIOC 6015 Metabolic Disorders -2011: directed this course -2008: co-directed this course, which involved grading oral presentations & mock grant proposals; also taught the extracellular matrices in metabolic disorders lecture Evaluation score: 1.32±0.41 (n=8)	Graduate School/	2	Co-Director
2008; 2010	CSBL 6021 Animal Models - 2010: taught 1 lecture: Models of Cardiovascular Disease in Mice; this involved 8 hours of preparation - 2008: taught 2 lectures: 1) Ways to Assess Cardiovascular Function in Mice; and 2) Surgical Models of Cardiac Disease; this involved 16 hours of preparation Student evaluation score: 1.00±0.00 (n=13)	Graduate School	3	Lecturer
2008	BME 6203 (Physiology for Engineers)/ 3/ 5 -taught 2 lectures on cardiac output, blood flow, and blood pressure (10 hours of preparation) Evaluation score: 1.33±0.04 (n=8 student responses in 2 lectures)	Graduate School	2.5	Lecturer
2006-2009	CSBL 5095 Experimental Design and Data Analysis - 2006: taught regression analysis and correlation lecture - 2007-8: taught 4-5 lectures/yr (10 hours of lectures) 2007 Evaluation score: 1.47±0.15 (n=126 student responses in 5 lectures) 2008 Evaluation score: 1.77±0.09 (n=90 student responses in 4 lectures) 2009 Evaluation score: 1.77±0.09 (n=139 student responses in 5 lectures)	Graduate School	2	Lecturer
2006-2010	INTD 5000 (Cell Biology) Fundamentals of Biomedical Sciences -Fall 2008-2010: taught extracellular matrix and integrin lecture 2008 Evaluation score: 1.50±0.45 (n=41); 2009 Evaluation score: 1.43±0.41 (n=38) -Fall 2007: taught extracellular matrix and integrin lectures Evaluation score: 1.38±0.03 (n=70) INTD 5007 (Cell Biology Core III) -Spring 2006 and 2007: taught the extracellular matrix and integrins lecture (3 hrs and 1.5 hrs) INTD5006 (Principle of Cellular and Molecular Biology) -Fall 2009: taught extracellular matrix and integrins lecture (n=1 student)	Graduate School	1	Lecturer
2005-2011	CSBL 6048/3/10 Biology of Aging -2005; 2008-2011: taught the cardiovascular aging lecture 2008 Evaluation score: 1.20±0.31 (n=12) 2009 Evaluation score: 1.27±0.27 (n=12) 2010 Evaluation score: 1.26±0.38 (n=10) 2011 Evaluation score: 1.16±0.19 (n=9)	Graduate School/	1	Lecturer
2007-2008	Research ST3300W -Supervised undergraduate Sarah McCurdy 8 hrs/ week for Fall 2007 and Spring 2008 semesters	St. Mary's University	0/8	Instructor
2007-2008	Basic Survival Skills: Stuff you need to know no matter what you end up doing -This is a 6-8 week mini-course taught Wednesdays 5-6:30 pm in the summer to 10 students in the B-	Graduate School/Undergraduate non-credit		Course Director

Sure program and the Cardiology summer students (high school, medical, and graduate); topics include ethics, time management, literature review, manuscript writing, and PowerPoint presentations.
2008 Evaluation score: 1.45±0.11 (n=69) 2007 Evaluation score: 1.58±0.16 (n=42)

2007-2008	CSB Mock Proposal	Grader	Graduate School 3	Grader
	2008: "The Role of Bone Morphogenetic Protein 2 In Regulating Mesenchymal Stem Cells Fate" Student: Wuchen Yang			
	2007: "The different roles of JNK isoforms in inflammation/ obesity induced insulin resistance"; Student: Xiaoban Xin			
	-included grading written and oral components as a practice for the oral qualifying exam			
2007	CSB Practice Grant- Hypothesis and aims review		Graduate School 2.5	Co-Reviewer/ Lecturer
2007	CSB Student Library Paper "The Nonreproductive Effects Of Estrogen"; Student: Margaux Salas	Graduate School/ Graduate	2 (non-contact)	Grader
2006	Medicine/Cardiovascular Disease Core Curriculum Conference	Medical School/ Medical topic:	1 extracellular matrix and integrins	Lecturer
2006-2011	Biology for Bioengineers/ 3 -taught the proteomics lecture	Graduate School/ Graduate	1.5	Lecturer
	2008 Evaluation score: 1.43±0.29 (n=8) 2009 Evaluation score: 1.64±0.83 (n=15)			
2004	Integrative Biology of the Cardiovascular System/3/<10	Graduate School/ Graduate	1 topic: critical thinking skills	Lecturer
1996	Physiology/3/<20	Medical School/ Graduate	3/wk	Teaching Assistant

Laboratory Rotations (Each rotation involved daily to weekly meetings to discuss, plan, and evaluate experiments.)

2005	CGS 720/721	Laboratory Rotation MUSC	Level: G	Student: Ira Matthew Mains
2006	BIOC 6097	Laboratory Rotation UTHSCSA	Level: G	Student: Harjinder Singh
2007	PHYL 6097	Laboratory Rotation UTHSCSA	Level: G	Student: Huimin Liu
2007	CSBL 6097	Laboratory Rotation UTHSCSA	Level: G	Student: Jessica Ibarra
2007	BIOC 6097	Laboratory Rotation UTHSCSA	Level: G	Student: Hongzhi Chen
2008	BIOC 6097	Laboratory Rotation UTHSCSA	Level: G	Student: Ying Ann Chiao
2008	ORTO 6002	Laboratory Rotation UTHSCSA	Level: G	Student: Michou Kelley
2008	CSBL 6097	Laboratory Rotation UTHSCSA	Level: G	Student: Jamila Momand
2009	BIOC 6097	Laboratory Rotation UTHSCSA	Level: G	Student: Lishi Sun
2009	INTD 6097	Laboratory Rotation UTHSCSA	Level: G	Student: Suzette Laing
2010	INTD 6097	Laboratory Rotation UTHSCSA	Level: G	Student: Nicolle Patterson
2010	INTD 6097	Laboratory Rotation UTHSCSA	Level: G	Student: Kelly Grimes

B. Instructional Development:

1. Formal Study to Improve Teaching, Research, and Administrative Abilities:

- 2006 "Minority Scientists: Where are They? Should We Care?" workshop; 1 hr professional development credit.
- 2006 "Leaks in the Pipeline: Do Faculty Mend Them or Create Them?" workshop; 1 hr professional development credit.
- 2006 "ABC's of Gen X, Y, & Z" workshop; 5 hrs professional development credit.
- 2006 Attended the 2006 Summer Training Course in Experimental Aging Research, an NIA-sponsored training course- only 19 of >50 applicants were invited to attend.
- 2006 UTHSCSA Teaching Excellence Course (UTEC) for professional development, sponsored by the Division of Educational Research and Development; received 26 hours of faculty development training to develop and practice key teaching skills.
- 2007 "Using the Logic Model in Grant Development" workshop; 2 hrs professional development credit.
- 2007 "National Leadership Workshop on Mentoring Women in Biomedical Careers: Mentoring is Everybody's Business;" November 27-28, 2007; NIH Campus, Natcher Conference Center, Bethesda, MD.
- 2011 "Conducting Clinical Research;" UTHSCSA.

C. Direction of Masters' Theses and Ph.D. Dissertations, Membership on Supervising Committees, and Supervision of Pre-doctoral Students and Postdoctoral Fellows:

1. Masters' Theses Directed:

2010-2012 Dissertation Committee Chair

Student: Nicolle Patterson
 Department: Biochemistry (Molecular Biophysics and Biochemistry Track)
 Degree: M.S.
 Thesis Title: Roles of Matrix Metalloproteinase-9 and Matrix Metalloproteinase-12 in Post-Myocardial Infarction Remodeling

2013-2014 Dissertation Committee Chair

Student: Courtney Cates
 Department: Biomedical Engineering (Mississippi State University)
 Degree: M.S.
 Thesis Title: The Role of Otolin-1 in Cardiac Matrix Remodeling Following Myocardial Infarction

2013-2015 Dissertation Committee Chair

Student: Presley L. Cannon
 Department: Biology (Mississippi College)
 Degree: M.S.
 Thesis Title: Biological Function of MMP-9 Generated Fibronectin 1178B Fragment

2. Ph.D. Dissertations Directed:

2007-2009 Dissertation Committee Chair

Student: Jessica Ibarra
 Department: Cellular and Structural Biology, UTHSCSA
 Degree: Ph.D.
 Thesis Title: Matrix Metalloproteinase-9 Roles in Left Ventricular Remodeling and Macrophage Function in Mice

2008-2011 Dissertation Committee Chair

Student: Ying Ann Chiao
 Department: Biochemistry (Metabolism and Metabolic Disorders Track), UTHSCSA
 Degree: Ph.D.
 Thesis Title: The Role of MMP-9 in Cardiac Aging

2018- Dissertation Committee Chair

Student: Osvaldo J. Rivera Gonzalez
 Department: Physiology
 Degree: Ph.D.
 Thesis Title: TBD

2018- Dissertation Committee Chair

Student: Michael (John) Daseke II
 Department: Physiology
 Degree: Ph.D.
 Thesis Title: TBD

3. Membership on Supervising Committees:

Thesis Committees:

2002-2003 Thesis Committee Member

Student: Robert E. Stroud
 Department: Physiology and Neuroscience, MUSC
 Degree: M.S.
 Thesis Title: Plasma Monitoring of the Myocardial Specific Tissue Inhibitor of Metalloproteinase-4 Following Alcohol-Induced Myocardial Infarction in Hypertrophic Obstructive Cardiomyopathy

2008-2008 Thesis Committee Member

Student: Marcello Pilia
 Department: Mechanical Engineering, UTSA
 Degree: M.S.
 Thesis Title: Left Ventricular Mechanical Properties Post-Myocardial Infarction and the Role of Matrix Metalloproteinase-9

2008-2011 Thesis Committee Member

Student: Tao Kang
 Department: Cellular and Structural Biology, UTHSCSA
 Degree: M.S.

Thesis Title: Crosstalk between Extracellular Matrix/ Collagen and Prostaglandin E₂-induced Signal Pathways in Regulation of Aromatase Expression in Adipose Stromal Cells

2011 Thesis Committee Member

Student: Yang Zhao

Department: Department of Mechanical Engineering, UTSA

Degree: M.S.

Thesis Title: Arterial Wall Remodeling Under Buckling in Organ Culture

2011 Thesis Committee Member

Student: Nguyen Nguyen

Department: Department of Electrical and Computer Engineering, UTSA

Degree: M.S.

Thesis Title: Targeting Myocardial Infarction-Specific Protein Interactions Using Computational Analyses

2012 Thesis Committee Member

Student: Justin Moreno

Department: Department of Mechanical Engineering, UTSA

Degree: M.S.

Thesis Title: The effects of pulmonary hypertension on the mechanical properties of arteries in Cav-1^{-/-} mice

Dissertation Committees:

2004-2007 Dissertation Committee Member

Student: Anne M. Deschamps

Department: Molecular and Cellular Biology and Pathobiology, MUSC

Degree: Ph.D.

Thesis Title: Mechanisms of Induction, Activation, and Trafficking of Myocardial Membrane Type-1 Matrix Metalloproteinase in Ischemia and Reperfusion

2006-2010 Dissertation Committee Member

Student: Beili Zhu

Department: Joint Program in Biomedical Engineering (UTSA/UTHSCSA)

Degree: Ph.D.

Thesis Title: Establishing Atherosclerosis Occlusion in Porcine Coronary Artery

2006-2008 Dissertation Committee Member

Student: Yong-Ung Lee

Department: Joint Program in Biomedical Engineering (UTSA/UTHSCSA)

Degree: Ph.D.

Thesis Title: Effects of Axial Stretch and Wall Injury on Intimal Hyperplasia in Arteries

2007-2008 Dissertation Committee Member

Student: Maggie M. Beranek

Department: Joint Program in Biomedical Engineering (UTSA/UTHSCSA)

Degree: Ph.D. (Graduated May 2008)

Thesis Title: Overcoming Restenosis: A Combinational Surface to Improve Vascular Device Biocompatibility

2007-2011 Dissertation Committee Member

Student: Danika Hayman

Department: Joint Program in Biomedical Engineering (UTSA/UTHSCSA)

Degree: Ph.D.

Thesis Title: Pulsatile Pressure: its effect on arterial structure and function

2007-2011 Dissertation Committee Member

Student: Chi Fung Lee

Department: Biochemistry, UTHSCSA

Degree: Ph.D.

Thesis Title: The Role of NADPH Oxidase 4 in Macrophage Function and Atherosclerosis

2008-2011 Dissertation Committee Member

Student: Avione Northcutt

Department: Joint Program in Biomedical Engineering (UTSA/UTHSCSA)

Degree: Ph.D.

Thesis Title: Determining the Critical Buckling Pressure of Blood Vessels through Modeling and In Vitro Experiments

2009-2011 Dissertation Committee Member

Student: Pramod Kumar Mishra

Department: Microbiology and Immunology, UTHSCSA

Degree: Ph.D.

Thesis Title: Mechanism of leukocyte trafficking into the central nervous system during murine neurocysticercosis

2008-2012 Dissertation Committee Member

Student: Sarah Ullevig
 Department: Biochemistry (Metabolism and Metabolic Disorders Track), UTHSCSA
 Degree: Ph.D.
 Thesis Title: Phytochemicals as Modulators of Thiol Oxidative Stress and Monocyte Recruitment

2011-2013 Dissertation Committee Member

Student: Celia Macias
 Department: Biomedical Engineering, UTSA
 Degree: Ph.D.
 Thesis Title: Non-Polymeric Coatings for Drug Eluting Coronary Stents

2011-2013 Dissertation Committee Member

Student: Yunji Wang
 Department: Electrical and Computer Engineering, UTSA
 Degree: Ph.D.
 Thesis Title: Modeling, Analysis, and Simulation of Macrophage Activation Post-myocardial Infarction

2010-2013 Dissertation Committee Member

Student: Omid Ghasemi
 Department: Department of Electrical and Computer Engineering, UTSA
 Degree: Ph.D.
 Thesis Title: Systemic Analysis of Gene Expression Post Myocardial Infarction Using Computational Approaches

2012-2014 Dissertation Committee Member

Student: Haihui Pan
 Department: Molecular Medicine, UTHSCSA
 Degree: Ph.D.
 Thesis Title: Physiology Role of RNA Polymerase II Pausing Factor, Negative Elongation Factor

2011-2014 Dissertation Committee Member

Student: Nguyen Nguyen
 Department: Department of Electrical and Computer Engineering, UTSA
 Degree: Ph.D.
 Thesis Title: Implications of Cardiac Extracellular Matrix Remodeling and Computational Frameworks to Improve the Knowledge Discovery Post-Myocardial Infarction

2010-2014 Dissertation Committee Member

Student: Andrew Voorhees
 Department: Biomedical Engineering, UTSA
 Degree: Ph.D.
 Thesis Title: The role of collagen in cardiac mechanics and adverse left ventricle remodeling post-myocardial infarction

2013-2017 Dissertation Committee Member

Student: Kristin Shirey
 Department: Biochemistry, UMMC
 Degree: Ph.D.
 Thesis Title: Characterization of Ionic Cyclic Lipopeptides as Effectors of Mitochondrial Electron Transfer and the Inner Membrane Anion Channel

2017- Dissertation Committee Member

Student: Trevi Mancilla
 Department: Physiology, UTHSCSA
 Degree: Ph.D.
 Thesis Title: Cardiac fibroblast roles in cardiac pathology following childhood cancer

2018- Dissertation Committee Member

Student: Hannah R. Turbeville
 Department: Pharmacology, UMMC
 Degree: M.D./Ph.D.
 Thesis Title: TBD

2018- Dissertation Committee Member

Student: Tyler M. Lomax
 Department: Physiology, UMMC
 Degree: Ph.D.
 Thesis Title: TBD

4. Membership on Supervising Committees as External Examiner:

2012 External Examiner for Dissertation Committee

Student: Vijay Kandalam
 Department: Physiology
 University: University of Alberta, Canada
 Degree: Ph.D.
 Thesis Title: The Role of TIMPs in Heart Disease

2013 External Examiner for Dissertation Committee

Student: David A. White
 Department: Baker IDI Heart and Diabetes Institute
 University: Monash University Institute of Graduate Research, Australia
 Degree: Ph.D.
 Thesis Title: The role of macrophage migration inhibitory factor in post-infarct inflammation and cardiac remodelling

Visiting graduate students

2013 Laura Pietrovito, graduate student from University of Florence

5. Pre-doctoral Students Supervised:**High School Students:**

1. C. Russell Horres III (Summer 2005; junior at Porter-Gaud School, Charleston, SC; South Carolina Governor's School for Science and Mathematics, Summer Program for Research Interns).
2. Elizabeth Lopez (Summers 2006-2008; June 12, 2008- graduated from John Jay Science and Engineering Academy, San Antonio, TX; UTHSCSA Summer Program for Research).
3. Reanna Witherspoon (Summers 2009-present; Voelcker Academy at UTHSCSA)

Undergraduate Students:

1. Christopher Keller (Summer 1997; Baylor College of Medicine SMART Program); resulted in authorship on 1 manuscript.
2. Kyle Wedin (Summer 1998; Baylor College of Medicine SMART Program); resulted in authorship on 1 manuscript.
3. Anjali Verghese (School Year 2001-2002; Massachusetts Institute of Technology student); resulted in authorship on 1 manuscript.
4. Shafara Dozier (Summer 2003; Medical University of South Carolina Summer Undergraduate Research Program); resulted in first authorship on 1 manuscript.
5. Shenikqua Bouges (Summer 2004; Medical University of South Carolina Summer Undergraduate Research Program); resulted in authorship on 1 manuscript.
6. Sarah Rozinek (Summer 2006; St. Mary's University and UTHSCSA Summer Research Program).
7. Harrison Davis (Summer 2006; UTHSCSA Biomedical Summer Undergraduate Research Experience (B-Sure) Program).
8. Rachel Finn (School Year 2006-2007; student volunteer)
9. Jesse Garcia (School Year 2006-2007; student volunteer)
10. Crystal Samaniego (Summer 2007; UTHSCSA Biomedical Summer Undergraduate Research Experience (B-Sure) Program).
11. Sarah McCurdy (Summer 2007- Summer 2008; student volunteer)- Sarah volunteered 20 hours per week in my laboratory during Summer 2007 and 10 hours per week during the Fall 2007 and Spring 2008 semesters. Sarah was 1 of 24 students from around the US to be accepted for the Summer 2008 American Physiological Society Undergraduate Fellowship, which provided her a stipend to work in my laboratory.
12. Joaquin Cigarroa IV (Summer 2008; UTHSCSA Physiology Summer Undergraduate Research Experience (PURE) Program); was accepted to UTHSCSA Medical School (Fall 2009)
13. Trevi Ramirez (April 2010- July 2012; volunteer or tech- in July 2012, Trevi enrolled in UTHSCA School of Medicine)
14. Daniel Levin (August 2010- July 2011; student volunteer- July 2011, Dan enrolled in UTHSCSA School of Medicine)
15. Dustin Bratton (February 2013- April 2014; researcher III)- Dusty enrolled in UMMC School of Medicine
16. Kayla Thomas (2014-2017)- Tougaloo College
17. De'Aries Shannon (Summer 2015)- University of Mississippi

Medical Students:

1. Robert Leonardi (Summer 2003; MUSC Medical Student Summer Research Program); resulted in authorship on 1 manuscript. Dr. Leonardi matched to the Duke University Internal Medicine Residency Program.
2. John Payne (Summer 2003; MUSC Medical Student Summer Research Program); resulted in authorship on 1 manuscript. Dr. Payne matched to the Emory University Ophthalmology Residency Program.
3. William Chase Corn (Summer 2004; MUSC Medical Student Summer Research Program).

4. Joseph T. Mingoia (Fall 2004, Biochemistry Course Research Elective and Summer 2005).
5. Jessica Lambert (Summer 2006; UTHSCSA Medical Student Summer Research Program).
6. Christian Corbitt (Summer 2006; UTHSCSA Medical Student Summer Research Program).
7. Arvin Bansal (Summer 2007; UTHSCSA Medical Student Summer Research Program).
8. Jamie Berger (Fall 2007; UTHSCSA 4th year medical student).
9. Paul Gravel (Fall 2007; UTHSCSA 4th year medical student).
10. Vinh Nguyen (Summer 2008; UTHSCSA Medical Student Summer Research Program).
11. Roger Dikdan (July 2008- May 2009; UTHSCSA 2nd year medical student).
12. Steven Kim (May-June 2009; UTHSCSA 3rd year medical student).
13. Tariq Dayah (Summer 2009; UTHSCSA Medical Student Summer Research Program)
14. Nicolas Spampinato (Jan 2010-11; UTHSCSA Medical Student Volunteer)
15. Serena Michelle Okoronkwo (Summer 2011; UTHSCSA medical student; Medical Student Training in Aging Research (MSTAR) program)
16. James R. Heaberlin (Summer 2012; UTHSCSA medical student; Medical Student Training in Aging Research (MSTAR) program)
17. Daniel Levin (Summer 2012; UTHSCSA summer medical student research program)
18. Majdouline Asher (Summer 2013; UMMC American Heart Association medical student summer fellowship program)
19. Jared White (Aug 2013- present; UMMC Medical Student Research Program)
20. Ahmad Faisal Allaf (Summer 2014; UMMC / Alfaisal University Summer Research Program)
21. Fayez Mourad (Summer 2014; UMMC / Alfaisal University Summer Research Program)
22. Norah AlSomali (Summer 2015; UMMC / Alfaisal University Summer Research Program)
23. Paula Garbin (Jan-March 2016; UMMC/ Brazil Medical Student Research Program)
24. Amanda Kaminski (May-Aug 2018; UMMC Medical Student Research Program)
25. Edwin (Taylor) Moore (May-Aug 2018; UMMC Medical Student Research Program)

6. Fellows, Residents, and Instructors Supervised:

Postdoctoral and Pre-faculty Fellows- Primary (Current):

1. Alan Mouton, PhD (May 2017- present)

Postdoctoral and Pre-faculty Fellows- Primary (Past):

1. Jianhua Zhang, M.D., Ph.D. (Sept 2009- April 2011; Dr. Zhang became a laboratory director at UTHSCSA.)
2. Patricia Shamhart, Ph.D. (Sept 2010- July 2011; Dr. Shamhart accepted an instructor position at Anne Arundel Community College)
3. Rogelio Zamilpa, Ph.D. (Dec 2007- March 2012; Dr. Zamilpa accepted a position in industry.)
4. YaoJun Li (February 2012- November 2012; Dr. Li accepted a fellowship in Houston.)
5. Ganesh Halade, Ph.D. (Sept 2010- April 2013; Dr. Halade transitioned to a tenure track assistant professor position at UAB, promoted to Associate Professor with tenure Oct 1, 2018)
6. Lisandra de Castro Brás, Ph.D. (June 2011- January 2014; Dr. de Castro Brás transitioned to a tenure track assistant professor position at ECU)
7. Fouad Zouein (January 2014- December 2014; Dr. Zouein transitioned to tenure track assistant professor at the American University at Beirut on July 1, 2015)
8. Yonggang Ma, Ph.D. (October 2010- December 2014; Dr. Ma transitioned to assistant professor when his AHA SDG grant was funded- he received a score of 1.15 (0.91%)). Dr. Ma left in Aug 2018 to join the faculty at USF as an assistant professor.
9. Ashley DeCoux (February 2014-February 2015)
10. Raffaele Altara (August 2014-April 2015)
11. Andriy Yabluchanskiy (April 2012- July 2015; Dr. Yabluchanskiy transitioned to tenure track assistant professor at the University of Oklahoma)
12. Kristine DeLeon, PhD (September 2011- present; Dr. DeLeon became an Instructor at UMMC in January 2014 and transitioned to Assistant Professor at UMMC and Research Health Scientist at the Jackson, MS VA in July 2017; in January 2018, she moved to MUSC as a tenure track Assistant Professor with affiliation at the Charleston VA)
13. Rugmani Padmanabhan Iyer (December 2011- present; Dr. Iyer became an Instructor at UMMC in March 2014 and transitioned to a Senior Scientist position at Merck in October 2017)
14. Cesar Meschiari, PhD (July 2016- July 2017)- Dr. Meschiari returned to Brazil a research position.
15. Mira Jung, PhD (January 2015- August 2017)- Dr. Jung joined Dr. Thomas Thum's lab in Germany for her 2nd postdoctoral fellowship.
16. Osasere Kelvin Ero, MBBS (April 2016- October 2017)- Dr. Ero left to start his residency program.

Co-Mentor:

1. Kristin Shirey Edwards (Sept 2017- present)

Co-Mentor (Past):

1. Amina El Jamali, Ph.D. (Dec 2007- June 2010)
2. Trista Robichaud, Ph.D. (June 2009- Dec 2010)
3. Deborah Zamora, Ph.D. (June 2009-2012)
4. Jennifer Chesnutt (Aug 2010-2013)

Residents:

1. Rushit Kanakia (February 2009- March 2009)
2. Tejas Patel (November 2009- January 2010)

7. Junior Faculty Mentored:

1. Claude Jourdan Le Saux, PhD (UTHSCSA)
2. Gregory J. Aune, MD, PhD (UTHSCSA)
3. Hiroe Toba, PhD- (UMMC & Kyoto) - Dr. Toba is an assistant professor from the Pharmacology Department of Kyoto University who spent 1.5 years in Jackson to further improve her cardiac research skills.
4. Stanley V. Smith, PhD (UMMC)
5. Michael Hall, MD (UMMC)
6. Lisandra de Castro Brás, PhD (ECU)
7. Yonggang Ma, PhD (UMMC)
8. Romain Harmancey, PhD (UMMC)
9. Michael Puskarich, MD (UMMC; member of K08 mentoring committee)
10. Utsav Nandi, MD (UMMC; member of MSCI mentoring committee)

III. RESEARCH**Complete List of Published Works in My Bibliography:**

<http://www.ncbi.nlm.nih.gov/sites/myncbi/merry.lindsey.1/bibliography/41659911/public/?sort=date&direction=descending>

A. Bibliography:**a) Books**

1. Foster DB, **Lindsey ML**, Agnetti G. Editors, Manual of Cardiovascular Proteomics, Springer, 2016.

b) Book chapters

1. Youker KA, Frangogiannis N, **Lindsey ML**, Smith CW, Entman ML. Adhesion Molecule Induction and Expression in Neutrophil Induced Myocardial Injury. In The Role of Immune Mechanisms in Cardiovascular Disease; H.P. Schultheiss and P. Schwimmbeck, Eds.; Springer. 125-137. (1997).
2. Frangogiannis NG, Burns AR, Perrard JL, Youker KA, **Lindsey ML**, Mendoza LH, Michael LH, Ballantyne CM, Smith CW, Entman ML. Evolving role of the mast cell in the acute and healing phase of an experimental canine myocardial infarction. In Coronary Microcirculation during Myocardial Ischemia and Reperfusion. Haunso S, Aldershvile J, Svendsen JH (eds). Munksgaard International Publishers; 41: 287-293. (1997).
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4. Lin J, and **Lindsey ML**. MMP Roles in the Initiation and Progression of Cardiac Remodelling Leading to Congestive Heart Failure. In Matrix metalloproteinases in tissue remodeling and inflammation. V Lagente and E Boichot, Eds.; Birkhauser. (2008).
5. Jin Y and **Lindsey M**. Multi-Scale Modeling and Analysis of Left Ventricular Remodeling Post Myocardial Infarction: Integration of Experimental and Computational Approaches. Book chapter in "Machine Learning," IntecWeb, (2009).
6. Zamilpa R, Chiao YA, Dai Q, Bansal A, **Lindsey ML**. Cardiac Fibroblast Functions Following Myocardial Infarction: Cause and Effect Roles of MMPs and TIMPs. Book chapter in "The Cardiac Fibroblast," Neil A. Turner, Editor. Research Signpost. (2011).
7. DeLeon K, de Castro Bras L, Ma Y, Halade G, **Lindsey ML**. Extracellular matrix biomarkers of adverse remodeling after myocardial infarction. Book chapter in "Cardiac Remodeling: Molecular Mechanism,s" Dr. B. I. Jugdutt and Dr. N.S. Dhalla, Editors. Springer. (2013).
8. Zamilpa R, Zhang J, Chiao YA, de Castro Bras L, Halade G, Ma Y, Hacker SO, **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, Humana Press. 1037:313-24 (2013). PMC3970183
9. Yabluchanskiy A, Li Y, de Castro Brás LE, Hakala K, Weintraub ST, **Lindsey ML**. Proteomic analysis of the left ventricle post-myocardial infarction to identify *in vivo* candidate matrix metalloproteinase substrates. In *Cell-Cell*

- Interactions*, Methods in Molecular Biology. Editor: Baudino T. Humana Press. Volume 1066, 2013, Pages 185-199. PMC3971009
10. Yamamoto D, Takai S, **Lindsey ML**. Molecular Mechanisms and Pharmacological Implications of MMP-9 Inhibition by ACE Inhibitors. In *ACE Inhibitors*. Nova Science Publ., Inc. 179-198 (2013).
 11. Nguyen NT, Yabluchanskiy A, de Castro Brás LE, Jin Y-F, **Lindsey ML**. Aging-Related Changes in Extracellular Matrix: Implications for Ventricular Remodeling Following Myocardial Infarction. In *Aging and Heart Failure: Mechanisms & Management*. Editor: Jugdutt B. Springer. 377-389 (2014).
 12. DeLeon KY, Yabluchanskiy A, Winniford MD, Lange RA, Chilton RJ, **Lindsey ML**. Chapter 35. Modifying Matrix Remodeling To Prevent Heart Failure. In *Cardiac Regeneration and Repair Volume I: Pathology and Therapies*. Editors: Li R-K and Weisel RD. 41-60 (2014).
 13. Ma Y, Iyer RP, de Castro Brás LE, Toba H, Yabluchanskiy A, DeLeon KY, Hall ME, Lange RA, **Lindsey ML**. Chapter 4. Cross Talk Between Inflammation and Extracellular Matrix Following Myocardial Infarction. In *Inflammation in Heart Failure*. Editors: Blankesteyn WM and Altara R. Elsevier. 67-79 (2015).
 14. **Lindsey ML**, Gomes AV, Smith SV, de Castro Brás LE. How to Design a Cardiovascular Proteomics Experiment. In *Manual of Cardiovascular Proteomics*, Springer, 2016.
 15. Gilda JE, Folmes C, Cheah JX, Innes-Gawn T, **Lindsey ML**, Gomes AV. Synergizing proteomic and metabolomic data to study cardiovascular systems. In *Manual of Cardiovascular Proteomics*, Springer, 2016.
 16. **Lindsey ML** and Libby P. Matrix Metalloproteinases in Cardiovascular Diseases. In *Matrix Metalloproteinases in Health and Disease*, World Scientific, 2017.
 17. **Lindsey ML** and de Castro Brás LE. Matrix Metalloproteinase-9-Dependent Mechanisms of Reduced Contractility and Increased Stiffness in the Aging Heart. In *Fibrosis in Disease: An Organ-Based Guide to Disease Pathophysiology and Therapeutic Considerations*, Humana Press, 2019.
 18. de Castro Brás LE and **Lindsey ML**. Using Peptidomics to Identify Extracellular Matrix-Derived Peptides as Novel Therapeutics for Cardiac Disease. In *Fibrosis in Disease: An Organ-Based Guide to Disease Pathophysiology and Therapeutic Considerations*, Humana Press, 2019.

c) Journal articles published or in press

1. Kumar AG, Ballantyne CM, Michael LH, Kukielka GL, Youker KA, **Lindsey ML**, Hawkins HK, Birdsall HH, Mackay CR, LaRosa GJ, Rossen RD, Smith CW, Entman ML. Induction of Monocyte Chemoattractant Protein-1 in the Small Veins of the Ischemic and Reperfused Canine Myocardium. *Circulation*, 95:693-700. (1997).
2. Dreyer WJ, Burns AR, Phillips SC, **Lindsey ML**, Jackson P, Kukielka GL. Intercellular Adhesion Molecule-1 Regulation in the Canine Lung after Cardiopulmonary Bypass. *Journal of Thoracic and Cardiovascular Surgery*, 115:689-699. (1998).
3. Frangogiannis NG, **Lindsey ML**, Michael LH, Youker KA, Bressler RB, Mendoza LH, Spengler RN, Smith CW, Entman ML. Resident Cardiac Mast Cells Degranulate and Release Preformed TNF- α Initiating the Cytokine Cascade in Experimental Canine Myocardial Ischemia/ Reperfusion. *Circulation*, 98(7):699-710. (1998).
4. Frangogiannis NG, Perrard JL, Mendoza LH, Burns AR, **Lindsey ML**, Ballantyne CM, Michael LH, Smith CW, Entman ML. Stem Cell Factor Induction is Associated with Mast Cell Accumulation Following Canine Myocardial Ischemia and Reperfusion. *Circulation*, 98(7):687-698. (1998).
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7. Dreyer WJ, Phillips SC, **Lindsey ML**, Jackson P, Bowles NE, Michael LH, Entman ML. Interleukin 6 induction in the canine myocardium after cardiopulmonary bypass. *Journal of Thoracic and Cardiovascular Surgery*, 120(2):256-63. (2000).
8. Ducharme A, Frantz S, Aikawa M, Rabkin E, **Lindsey M**, Rohde LE, Schoen FJ, Kelly RA, Werb Z, Libby P, Lee RT. Targeted deletion of matrix metalloproteinase-9 attenuates left ventricular enlargement and collagen accumulation after experimental myocardial infarction. *Journal of Clinical Investigation*, 106(1):55-62. (2000). PMC517910
9. **Lindsey M**, Wedin K, Brown MD, Keller C, Evans AJ, Smolen J, Burns AR, Rossen RD, Michael LH, Entman ML. Matrix-Dependent Mechanism of Neutrophil-Mediated Release and Activation of MMP 9 in Myocardial Ischemia/ Reperfusion. *Circulation*, 103:2181-2187. (2001).
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11. **Lindsey ML**, Gannon J, Aikawa M, Schoen FJ, Rabkin E, Lopresti-Morrow L, Crawford J, Black S, Libby P, Mitchell PG, Lee RT. Selective Matrix Metalloproteinase Inhibition Reduces LV Remodeling But Does Not Inhibit Angiogenesis Following Myocardial Infarction. *Circulation*, 105:753-758. (2002).

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13. Stroud RE, Deschamps AM, Lowry AS, Hardin AE, Mukherjee R, **Lindsey ML**, Ramamoorthy S, Zile MR, Spencer WH, Spinale FG. Plasma Monitoring of the Myocardial Specific Tissue Inhibitor of Metalloproteinase-4 Following Alcohol-Induced Myocardial Infarction in Hypertrophic Obstructive Cardiomyopathy. *Journal of Cardiac Failure*, 11(2):124-130. (2005)
14. **Lindsey ML**, Goshorn DK, Squires CE, Escobar GP, Hendrick JW, Mingoia JT, Sweterlitsch SE, Spinale FG. Age-Dependent Changes in Myocardial Matrix Metalloproteinase / Tissue Inhibitor of Metalloproteinase (MMP/TIMP) Profiles and Fibroblast Function. *Cardiovascular Research*, 66:410-419. (2005). (2) **This article was quoted in the SAGE KE article "Environmental Movement" by Mitch Leslie, Sci. Aging Knowl. Environ., 2006 (7): nf9.**
15. Ikonomidis JS, Barbour JR, Amani Z, Stroud RE, Herron AR, McClister, Jr. DM, Camens SE, **Lindsey ML**, Mukherjee R, Spinale FG. Effects of Deletion of the Matrix Metalloproteinase-9 Gene on the Development of Murine Thoracic Aortic Aneurysms. *Circulation*, 112(9 Suppl.1):242-248. (2005).
16. Squires CE, Escobar GP, Payne JF, Leonardi RA, Goshorn DK, Sheats N.J., Mains I.M., Mingoia JT, Flack EC, **Lindsey ML**. Altered Fibroblast Function Following Myocardial Infarction. *Journal of Molecular and Cellular Cardiology*, 39(4):699-707. (2005). **A figure from this article was selected for the cover art.**
17. **Lindsey ML**, Escobar GP, Dobrucki LW, Goshorn DK, Bouges S., Mingoia JT, McClister Jr. DM, Su H, Gannon J, MacGillivray C, Lee RT, Sinusas AJ, Spinale FG. Matrix Metalloproteinase-9 Gene Deletion Facilitates Angiogenesis Following Myocardial Infarction. *American Journal of Physiology (Heart and Circulation Physiology)*, 290(1):H232-239. (2006).
18. **Lindsey ML**, Goshorn DK, Comte-Walters S, Hendrick JW, Hapke E, Zile MR, Schey K. A Multidimensional Approach to Identify Hypertrophy-Associated Proteins. *Proteomics*, 6(7):2225-2235. (2006).
19. Flack EC, **Lindsey ML**, Squires CE, Kaplan BS, Stroud RE, Clark LL, Escobar GP, Yarbrough WM, Spinale FG. Alterations in cultured myocardial fibroblast function following the development of left ventricular failure. *Journal of Molecular and Cellular Cardiology*, 40(4):474-483. (2006).
20. **Lindsey ML**, Escobar GP, Mukherjee R, Goshorn DK, Sheats NJ, Bruce JA, Mains IM, Hendrick JW, Hewett KW, Gourdie RG, Matrisian LM, Spinale FG. Matrix Metalloproteinase-7 Affects Connexin 43 Levels, Electrical Conduction, and Survival Following Myocardial Infarction. *Circulation*, 113:2919-2928. (2006).
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75. Ma Y, Zhang J, Manicone A, **Lindsey ML**. Matrix Metalloproteinase-28 Deletion Preserves Cardiac Function Following Myocardial Infarction in Mice. American Heart Association Scientific Sessions, Orlando, FL. (2011)
76. Bhatnagar H, Ji L, **Lindsey ML**, LeSaux C. Caveolin-1-dependent Inhibition of Transforming Growth Factor- β Pathway Alters Inflammation Post Myocardial Infarction. American Heart Association Scientific Sessions, Orlando, FL. (2011)
77. Chiao, YA (finalist), Jin Y-F, Shamhart P, Zamilpa R, Dai Q, Ramirez TA, Zhang J, **Lindsey ML**. Matrix Metalloproteinase-9 Deletion Attenuates Myocardial Fibrosis and Diastolic Dysfunction in Aging Mice. American Heart Association Scientific Sessions, Orlando, FL. (2011). This abstract was selected for oral presentation in the

- Functional Genomics and Translational Biology Young Investigator Award session.
78. Wang Y, Ma Y, Halade G, **Lindsey ML**, Jin Y-F. Mathematical modeling of macrophage activation post myocardial infarction. IEEE GENSIPS 2011, San Antonio, TX. (2011)
 79. Nguyen N, Zhang X, Wang Y, Han HC, Chilton R, Lange R, **Lindsey ML**, Jin Y-F. Targeting myocardial infarction-specific protein-protein interaction network with computational approaches. IEEE GENSIPS 2011, San Antonio, TX. (2011)
 80. Ramirez TA, Jourdan-LeSaux C, Joy A, Zhang J, Dai Q, Mifflin S, **Lindsey ML**. Chronic and intermittent hypoxia differentially regulate the left ventricular inflammatory and extracellular matrix responses. FASEB J March 29, 2012 26:874.9. This abstract was also presented at the 2012 Department of Medicine Research Day, and Trevi Ramirez won the first place award for her poster. (2012)
 81. de Castro Bras LE, Dai Q, Zamilpa R, Fields GB, Weintraub ST, **Lindsey ML**. MMP-9 Generated Collagen I C-propeptides Alter Cardiac Fibroblast Function. FASEB J March 29, 2012 26:1059.3 (2012)
 82. Ma Y, Zhang J, Ramirez TA, Manicone AM, **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 (2012)
 83. Halade GV, Ramirez TA, Zhang J, Hensler JG, Jin Y-F, **Lindsey ML**. Brain-Derived Neurotrophic Factor Intensifies the Early Inflammatory Response After Myocardial Infarction. FASEB J March 29, 2012 26:1057.29 (2012)
 84. Zamilpa R, Ramirez TA, Dai Q, Dayah T, Nguyen N, Zhang J, Ahuja SS, D'Armiento J, Jin Y-F, **Lindsey ML**. MMP-9 overexpression in macrophages regulates the post-myocardial infarction inflammatory response through SCYE1. FASEB J March 29, 2012 26:399.2 (2012)
 85. De Castro Brás L, DeLeon K, Dai Q, Ma Y, Halade GV, Hakala K, Weintraub ST, **Lindsey ML**. Proteomic Profiling of Fractionated Post-myocardial Infarction Plasma Identifies MMP-9 Dependent Markers. 60th ASMS Conference on Mass Spectrometry, Vancouver, Canada. (2012)
 86. Ma Y, Jin YF, Zhang J, Ramirez TA, Voorhees A, Manicone AM, Han H-C, **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. (2012). Selected for oral presentation.
 87. Okoronkwo SM, Chiao YA, **Lindsey ML**. Matrix Metalloproteinase-9 Deletion Attenuates Age-Related Diastolic Dysfunction and Myocardial Collagen Deposition. 2012 American Geriatrics Society (AGS) Annual Scientific Meeting, Seattle, WA. (2012). Ms. Okoronkwo received a travel award to present this poster.
 88. de Castro Brás LE, DeLeon KY, Ma Y, Dai Q, Hakala K, Weintraub ST, **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. (2012)
 89. Ghasemi O, Nguyen N, Ramirez TA, Zhang J, **Lindsey ML**, Jin Y-F. A Biclustering Approach to Analyze Drug Effects on Extracellular Matrix Remodeling Post-Myocardial Infarction. 2012 IEEE International Conference on Bioinformatics and Biomedicine Workshops (BIBMW). Philadelphia, PA. (2012)
 90. Voorhees A, Ma Y, DeLeon KY, Halade GV, **Lindsey ML**, Han HC. Failure Strength of the Infarcted Left Ventricle in Matrix Metalloproteinase-28 Null Mice. BMES Annual Meeting, Atlanta, GA. (2012)
 91. de Castro Bras LE, DeLeon KY, Dai Q, Fields GB, Weintraub ST, **Lindsey ML**. MMP-9 Generated Collagen I C-terminus Peptides Enhance Cardiac Fibroblast Wound Healing Response. Circulation. 126(21_MeetingAbstracts): p. A16016. Scientific Sessions. (2012). Selected for oral presentation.
 92. Grimes KM, Chiao YA, **Lindsey ML**, Buffenstein R. Cardiac Function in an Extraordinarily Long-lived Rodent, the Naked Mole-rat. Circulation. 2012; 126(21_MeetingAbstracts): p. A9857. Scientific Sessions. (2012)
 93. Ma Y, Halade GV, Zhang J, Ramirez TA, Voorhees A, Manicone AM, Jin Y-F, Han H-C, **Lindsey ML**. Matrix Metalloproteinase-28 Deletion Exacerbates Cardiac Dysfunction and Rupture Following Myocardial Infarction in Mice. Circulation. 2012; 126(21_MeetingAbstracts): p. A15381. Scientific Sessions. (2012)
 94. Halade GV, Ma Y, Ramirez RA, Zhang J, Dai Q, Hensler J, Lopez EF, Jin Y-F, **Lindsey ML**. Reduced BDNF Attenuates Early Inflammation And Improves Long-term Survival Following Myocardial Infarction in Mice. Circulation. 2012; 126(21_MeetingAbstracts): p. A12452. Scientific Sessions. (2012)
 95. Iyer RP, Patterson NL, Fields GB, **Lindsey ML**. Matrix Metalloproteinase-9 Inhibition Attenuates ADAMTS2 and TOLLIP Expression Post-Myocardial Infarction in Mice. Glycobiology, 22(11), 2012, No. 313. ASMB:SFG Joint Meeting, San Diego, CA. (2012)
 96. de Castro Bras LE, DeLeon KY, Yabluchanskiy A, Ma Y, Halade GV, Hakala K, Weintraub ST, and **Lindsey ML**. MMP-9 dependent proteins regulate left ventricular remodeling following myocardial infarction. The FASEB Journal 27: 1129.1124, 2013.
 97. Halade GV, Ma Y, Ramirez TR, Zhang J, Dai Q, Hensler JG, Lopez EF, Ghasemi O, Jin Y-F, and **Lindsey ML**. Reduced BDNF attenuates inflammation and angiogenesis to improve survival and cardiac function following myocardial infarction in mice. The FASEB Journal 27: 1085.1086, 2013.
 98. 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. The FASEB Journal 27: 386.312, 2013.

99. DeLeon KY, de Castro Bras LE, Zhang J, and **Lindsey ML**. Circulating *Porphyromonas gingivalis* lipopolysaccharide induces left ventricular dysfunction through MMP-9 regulation of inflammation. *The FASEB Journal* 27: 1128.1114, 2013.
100. Yabluchanskiy A, Ma Y, Chiao YA, Lopez E, Zhang J, Jin Y-F, and **Lindsey ML**. MMP-9 dependent early biomarkers of cardiac aging. *The FASEB Journal* 27: 1194.1195, 2013.
101. Iyer RP, Patterson N, Fields G, **Lindsey ML**. Matrix Metalloproteinase-9 Inhibition Attenuates Wall Thinning but Increases Neutrophil Infiltration Post-Myocardial Infarction in Mice. *The FASEB Journal* 27: 646.610, 2013.
102. Heaberlin J, Ma Y, Zhang J, Ahuja SS, **Lindsey ML**, Halade GV. *KKAY* mice show decreased survival but reduced ventricular dysfunction following myocardial infarction. 2013 American Geriatrics Society (AGS) Annual Scientific Meeting, Grapevine, TX. (2013)
103. Ma Y, Chiao YA, Ghasemi O, **Lindsey ML**, Jin YF. AHA 2013, Dallas, TX. Matrix Metalloproteinase-9 Deletion Alters the Age-associated Inflammatory Profile by Upregulating M2 Macrophage Polarization. *Circulation*. 128(22):A16783. AHA Scientific Sessions, Dallas, TX. (2013)
104. **Lindsey ML** and Halade GV. DHA and EPA differentially modulate the inflammatory response following myocardial infarction in obese and aging mice. *Circulation*. 128(22):A15570. AHA Scientific Sessions, Dallas, TX. (2013)
105. Iyer RP, Patterson N, Dive V, **Lindsey ML**. Matrix Metalloproteinase-12 Inhibition Exacerbates Cardiac Dysfunction and Stimulates Inflammation Post-Myocardial Infarction in Mice. *Circulation*. 128(22):A17580. AHA Scientific Sessions, Dallas, TX. (2013)
106. Yabluchanskiy A, Ma Y, Chiao YA, Bratton DR, Jin YF, **Lindsey ML**. Matrix metalloproteinase-9 deletion blunts inflammation and facilitates scar formation post-myocardial infarction in the aging left ventricle. *Circulation*. 128(22):A15285. AHA Scientific Sessions, Dallas, TX. (2013)
107. de Castro Brás LE, DeLeon-Pennell KY, Bratton DR, Ma Y, Yabluchanskiy A, Halade GV, **Lindsey ML**. Matrix Metalloproteinase-9 Stimulated Osteopontin Proteolysis Enhances the Extracellular Matrix Response Post Myocardial Infarction. *Circulation*. 28(22):A15262. AHA Scientific Sessions, Dallas, TX. (2013)
108. Iyer R, Patterson N, Dive V, and **Lindsey M**. Matrix metalloproteinase-12 inhibition causes cardiac dysfunction post-myocardial infarction in mice (1151.3). *The FASEB Journal* 28: 2014.
109. Yabluchanskiy A, Ma Y, Chiao YA, Voorhees A, Han H-C, Jin Y, and **Lindsey M**. MMP-9 deletion improves vascular permeability and angiogenesis in aging mice (880.8). *The FASEB Journal* 28: 2014.
110. Ball J, Syed M, Maranon R, Reckelhoff J, Yanes Cardozo L, Iyer R, **Lindsey M**, and Romero D. Role of blood pressure in chronic aldosterone-mediated cardiac injury (701.5). *The FASEB Journal* 28: 2014.
111. Halade G, Lopez E, Kabarowski J, and **Lindsey M**. Obesity superimposed on aging magnifies the inflammatory and plasma lipid mediator responses following myocardial infarction (1155.1). *The FASEB Journal* 28: 2014.
112. DeLeon-Pennell KY, de Castro Brás LE, Bratton DR, **Lindsey ML**. Systemic *Porphyromonas gingivalis* lipopolysaccharide exacerbates the inflammatory response post-myocardial infarction through matrix metalloproteinase-9. *Experimental Biology*, San Diego, CA. (2014)
113. de Castro Bras L, DeLeon-Pennell K, Ma Y, Yabluchanskiy A, Iyer R, Fields G, and **Lindsey M**. Collagen C-peptide roles in post-myocardial infarction remodeling (867.15). *The FASEB Journal* 28: 2014.
114. Toba H, de Castro Brás L, Weintraub S, Jin Y-F, Bradshaw A, and Lindsey M. Age and SPARC dependent cardiac collagen changes (1120.7). *The FASEB Journal* 28: 2014.
115. Grimes K, **Lindsey M**, and Buffenstein R. Left ventricular structure and function in the aging naked mole-rat, the longest-lived rodent (879.1). *The FASEB Journal* 28: 2014.
116. DeCoux A, Tian Y, Nguyen NT, Flynn EF, Cannon PL, Jin YF, Jones AE, Puskarich MA, **Lindsey ML**. Sepsis Survivors and Non-Survivors Exhibit Changes in Distinct Proteins Within Common Pathways: A Glycoproteomic Analysis. NHLBI Proteomics Centers Seventh PI Meeting, Bethesda, MD. (2014)
117. 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. Baltimore, MD. (2014)
118. 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. (2014)
119. Yabluchanskiy A, Ma Y, DeLeon-Pennell KY, Jin Y-F, **Lindsey ML**. Matrix metalloproteinase-9 deletion shifts macrophage polarization towards M2 phenotype in aged left ventricles post-myocardial infarction. *Cardiovascular Research* 103(Suppl. 1):S6. *Frontiers in Cardiovascular Biology* 2014, Barcelona, Spain. (2014)
120. Tian Y, de Castro Brás LE, **Lindsey ML**. Proteomic mapping of MMP-9 cleavage sites on fibronectin. 2nd *Cardiovascular Forum for Promoting Centres of Excellence and Young Investigators*, Winnipeg, Manitoba, Canada. (2014)
121. Tian Y, DeCoux A, Flynn E, Jones A, **Lindsey ML**, Puskarich M. Sepsis associated glycoproteins in plasma. *International Human Proteomics Organizer (HUPO)*, Madrid, Spain. (2014)
122. de Castro Brás LE, DeLeon-Pennell KY, Yao H, Tian Y, **Lindsey ML**. EMILIN-1 and Talin-2 are Matrix Metalloproteinase-9 Dependent Mechanisms of Stiffness in the Aging Heart. *HUPO 2014*, Madrid, Spain. (2014)

123. Iyer RP, Patterson NL, Fields GB, **Lindsey ML**. Early Matrix Metalloproteinase-9 Inhibition Stimulates Neutrophil Infiltration and Delays Neutrophil Apoptosis Post-Myocardial Infarction in Mice. *Circulation*. 130(Suppl_2):A13389. AHA Scientific Sessions 2014, Chicago, IL. (2014)
124. Yabluchanskiy A, Ma, Y, Bratton DR, Chiao YA, Voorhees A, Han HC, Jin YF, **Lindsey ML**. What's the Best Age for Mice to Have Myocardial Infarction: Modulating Matrix Metalloproteinase-9 to Answer the Question. *Circulation*. 130(Suppl_2):A13984. AHA Scientific Sessions, Chicago, IL. (2014)
125. DeLeon-Pennell KY, de Castro Brás LE, Iyer RP, Flynn ER, Jin YF, **Lindsey ML**. Systemic Exposure of *Porphyromonas Gingivalis* Induces Early Cardiac Dysfunction Through Activation of Cytotoxic T-Cells. *Circulation*. 130(Suppl_2):A15796. AHA Scientific Sessions, Chicago, IL. (2014)
126. Ma Y, Yabluchanskiy A, Clark R, Cannon PL, Flynn ER, Jin YF, **Lindsey ML**. CXCL4 Aggravates Mortality and Left Ventricular Dilation Following Myocardial Infarction by Polarizing Macrophages to a Pro-inflammatory M1 Phenotype. *Circulation*. 130(Suppl_2):A14885. AHA Scientific Sessions, Chicago, IL. (2014)
127. Toba H, de Castro Brás LE, Baicu CF, Zile MR, **Lindsey ML**, Bradshaw AD. SPARC Deletion Suppresses Age-related Cardiac Inflammation. *Circulation*. 130(Suppl_2):A15308. AHA Scientific Sessions, Chicago, IL. (2014)
128. Nguyen NT, **Lindsey ML**, Jin Y-F. Systems analysis of gene ontology and biological pathways involved in post-myocardial infarction responses. *BMC Genomics*. 16(Suppl 7):S18. International Conference on Intelligent Biology and Medicine (ICIBM), San Antonio, TX. (2014)
129. Nguyen NT, **Lindsey ML**, Jin YF. Systems analysis of gene ontology and biological pathways involved in post-myocardial infarction responses. *BMC Genomics Supplement Issue for ICIBM*, San Antonio, TX. (2014)
130. Iyer RP, De Castro Brás LE, Patterson NL, Fields GB, **Lindsey ML**. Early Matrix Metalloproteinase-9 Inhibition Worsens Post-Myocardial Infarction Cardiac Dysfunction by Delaying Resolution of Inflammation. *Cell Biology of the Heart: Beyond the Myocyte-Centric View, Keystone Symposia*, Colorado. (2015)
131. DeLeon-Pennell KY, Flynn E, Jin YF, Buchanan W, **Lindsey ML**. Systemic *Porphyromonas gingivalis* Endotoxin Attenuates Fibroblast Matrix Deposition Post-Myocardial Infarction. *Proceeding of the: International Association for Dental Research General Session 2015*, Boston, MA. (2015)
132. DeLeon-Pennell K, Flynn E, Jin Y, Buchanan W, and **Lindsey M**. Macrophage Activation by Chronic *P. gingivalis* Endotoxin Attenuates Fibroblast Matrix Deposition Post-Myocardial Infarction. *The FASEB Journal* 29: 2015.
133. Toba H, de Castro Brás L, Baicu C, Zile M, Lindsey M, and Bradshaw A. SPARC Facilitates Inflammation in the Aging Heart and Suppresses Macrophage M2 Polarization. *The FASEB Journal* 29: 2015.
134. Ma Y, DeCoux A, Yabluchanskiy A, Clark R, Jin Y-F, and **Lindsey M**. Neutrophil Polarization Following Myocardial Infarction in Mice. *The FASEB Journal* 29: 2015.
135. **Lindsey ML**. MMP-9 mediated mechanisms of diastolic dysfunction. *Annual Meeting of the International Academy of Cardiovascular Sciences: North American Section. Current Research: Cardiology*, 2(3):127. (2015)
136. DeLeon-Pennell KY, Iyer RP, Ma Y, Yabluchanskiy A, Halade GV, **Lindsey ML**. Lower levels of interleukin-6 in female mice at days 1 and 3 post-myocardial infarction attenuate neutrophil infiltration, rupture, and left ventricular dilation. *APS-Cardiovascular, Renal & Metabolic Diseases: Physiology & Gender*, Annapolis, MD. (2015)
137. **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. *The FASEB Journal* 30: 160.163, 2016.
138. Iyer RP, de Castro Brás LE, Jung M, Ma Y, DeLeon-Pennell KY, Flynn ER, Cannon PL, Cates CA, and **Lindsey ML**. Matrix Metalloproteinase-12 Reduces Cardiac Dilation Post-Myocardial Infarction by Decreasing Neutrophil Accumulation. *The FASEB Journal* 30: 1210.1215, 2016.
139. Jung M, Ma Y, Yabluchanskiy A, Iyer RP, and **Lindsey ML**. IL-10 polarizes macrophages in vivo to an anti-inflammatory phenotype to improve cardiac remodeling post-myocardial infarction. *The FASEB Journal* 30: 1205.1203, 2016.
140. DeLeon-Pennell K, 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 Dilation and Rupture. *The FASEB Journal* 30: 1205.1201, 2016.
141. White J, Iyer RP, De Castro Brás LE, Cannon PC, Ma Y, DeLeon-Pennell KY, Jung M, Flynn EF, Henry JB, Bratton DB, Fulton LK, Grady AW, **Lindsey ML**. Defining the Sham Environment for Post Myocardial Infarction Studies in Mice. *University of Mississippi Medical Center Department of Medicine Research Day*, Jackson, MS. (2016)
142. DeLeon-Pennell KY, Padmanabhan Iyer R, Cates CA, Flynn E, Ma Y, Cannon P, Shannon D, Garrett MR, Buchanan W, and **Lindsey ML**. Chronic inflammation inhibits myofibroblast activation through macrophage Ccl12 secretion. *International Society for Heart Research World Congress*, Buenos Aires, Argentina. (2016)
143. Nielsen SH, Flynn ER, and **Lindsey ML**. Macrophages are the Source of MMP-9 generated Osteopontin Fragment in the Post-Myocardial Infarction Left Ventricle. *American Society for Matrix Biology Biennial Meeting*, St. Petersburg, FL. (2016)
144. Kamimura D, Suzuki T, Furniss AL, Griswold ME, **Lindsey ML**, Winniford MD, Butler KR, Mosely TH, Hall ME. Elevated Serum Osteoprotegerin is Associated with Increased Left Ventricular Mass Index and Left Ventricular

- Diastolic Stiffness in African Americans: Insights from the Genetic Epidemiology Network of Arteriopathy (GENOA) Study. *Circulation* 134: A11417. (2016)
145. DeLeon-Pennell KY, Ero OK, Flynn ER, Espinoza I, Musani SK, Vasan RS, Hall ME, Fox ER, **Lindsey ML**. Plasma glycoproteomics reveals gender-specific activation of distinct pathways linked to heart failure development following myocardial infarction. *Eur J Heart Failure*. 19:132. (2017).
 146. **Lindsey ML**, Jung M, Yabluchanskiy A, Cannon P, 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. *The FASEB Journal* 31: 1079.4, 2017.
 147. Jung M, Ma Y, Yabluchiansiy A, Iyer RP, DeLeon-Pennell KY, Garrett MR, and **Lindsey ML**. IL-10 improves cardiac remodeling post-myocardial infarction by increasing M₂ macrophage polarization to improve scar formation. *The FASEB Journal* 31: 875.2, 2017
 148. 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. *The FASEB Journal* 31: 694.6, 2017
 149. **Lindsey ML**, Iyer RP, Flynn ER, Pan H. MMP-12 is an Inflammation Resolution Promoting Factor. Keystone Symposia Conference, Dublin, Ireland. (May 2017)
 150. Jung M, Ma Y, Iyer RP, Yabluchiansky A, Garrett MR, and **Lindsey ML**. IL-10 Regulates Inflammation to Improve LV Physiology After Myocardial Infarction by Stimulating M2 Macrophage Polarization and Fibroblast Activation. AHA Basic Cardiovascular Sciences Summer Conference, Portland, Oregon. (July 2017)
 151. Nielsen SH, Flynn ER, **Lindsey ML**. Macrophage-derived osteopontin is fragmented by MMP-9 to hinder angiogenesis in the post-myocardial infarction left ventricle. *European Heart Journal*, 38: Suppl 1 (2017)
 152. Lui X, Zhang J, Zeigler Ac, **Lindsey ML**, Saucerman JJ. Large-scale Logic-based Differential Equation Computational Model Revealed a New Dimension in Macrophage Polarization. Biomedical Engineering Society (BMES) Annual Meeting, Phoenix, Arizona. (October 2017)
 153. Mouton AJ, Ma Y, Garrett MR, DeLeon-Pennell KY, **Lindsey ML**. Defining Cardiac Fibroblast and Macrophage Transcriptomic Signatures in the Post-MI Left Ventricle. Graduate Studies Research Day, Jackson, MS. (October 2017)
 154. Mouton AJ, Ma Y, DeLeon-Pennell KY, Garrett MR, Freeman TC, and **Lindsey ML**. Post-Myocardial Infarction Cardiac Fibroblast Transcriptomic Signatures Reveal Angiogenesis Regulation. Keystone Meeting- Heart Failure: Crossing the Translational Divide, Keystone, CO (January 2018)
 155. DeLeon-Pennell KY, **Lindsey ML**, Flynn ER, and Menick DR. CD8 T-Cells Have a Biphasic Role During Post-Myocardial Infarction Cardiac Remodeling. Oral and poster presentations, Experimental Biology, San Diego, CA (April 2018)
 156. Mouton AJ, Ma Y, DeLeon-Pennell KY, Garrett M, and **Lindsey ML**. Day 1 Post-Myocardial Infarction Cardiac Macrophage Transcriptomic Signatures that Link to LV Infarct Wall Thinning. Experimental Biology, San Diego, CA (April 2018)
 157. DeLeon-Pennell KY, Ma Y, Yabluchanskiy A, Flynn ER, Halade GV, De Castro Bras LE, and **Lindsey ML**. The Mouse Heart Attack Research Tool (MHART) 1.0 Database. Experimental Biology, San Diego, CA (April 2018)
 158. **Lindsey ML**, Jung M, Yabluchanskiy A, Cannon P, Iyer RP, Flynn ER, DeLeon-Pennell KY, Ma Y. Exogenous CXCL4 Infusion Inhibits Macrophage Phagocytosis by Limiting CD36 Signaling to Enhance Post-myocardial Infarction Cardiac Dilation. International Society for Heart Research North American Section Meeting, Halifax, Canada (May 2018)
 159. Mouton A, Flynn ER, Ma Y, DeLeon-Pennell KY, Garret MR, Freeman TC, and **Lindsey ML**. Homeostatic-like Cardiac Fibroblasts Turn off Angiogenesis Following Myocardial Infarction Wound Healing. American Society for Matrix Biology Biennial Meeting, Las Vegas, NV (Oct 2018). Also presented for the UMMC Graduate School Research Day, Jackson, MS (Oct 2018).
 160. Daseke II MJ, Mouton A, and **Lindsey ML**. Neutrophils play a direct role in extracellular matrix reorganization over the myocardial infarction time continuum. UMMC Graduate School Research Day, Jackson, MS (Oct 2018)
 161. Rivera Gonzalez OJ, Hall ME, and **Lindsey ML**. MMP-12 as a prognostic indicator of Cardiac Remodeling after Myocardial Infarction. UMMC Graduate School Research Day, Jackson, MS (Oct 2018)
 162. Kaminski AR, Flynn ER, Moore ET, and **Lindsey ML**. Matrix metalloproteinase expression in the left ventricle following myocardial infarction. UMMC Graduate School Research Day, Jackson, MS (Oct 2018)
 163. Moore ET, Flynn ER, Kaminski AR, **Lindsey ML**. Matrix metalloproteinases as biochemical indicators of left ventricular remodeling after myocardial infarction. UMMC Graduate School Research Day, Jackson, MS (Oct 2018)

f) Other

Invited Lectures and Presentations:

1. Cardiology Division Seminar Series, Brigham and Women's Hospital, Boston, MA. (2000).
2. Vascular Research Division Seminar Series, Brigham and Women's Hospital, Boston, MA. (2002).
3. Grand Rounds, Cardiovascular Disease Division, University of Alabama at Birmingham, Birmingham, AL. (2002).
4. Cardiothoracic Division Seminar Series, Medical University of South Carolina, Charleston, SC. (2002).

5. Program in Molecular and Cellular Biology and Pathobiology Seminar Series, Medical University of South Carolina, Charleston, SC. (2003).
6. Department of Cell and Molecular Pharmacology and Experimental Therapeutics Seminar Series, Medical University of South Carolina, Charleston, SC. (2003).
7. "Applications to Specific Disease States: Hypertrophy." In the Basic Science Workshop "The Cardiovascular Proteomics Initiative: Defining a New Frontier in Cardiovascular Research," Heart Failure Society of America Conference, Las Vegas, NV. (Sept 2003).
8. Cardiology Research Conference at the University of Texas Health Science Center at San Antonio, San Antonio, TX. (Feb 2005).
9. Department of Pharmacology and Neuroscience Seminar Series, Texas Tech University Health Science Center, Lubbock, TX. (Feb 2005).
10. Department of Cellular and Structural Biology Seminar Series at the University of Texas Health Science Center at San Antonio, San Antonio, TX. (Sept 2005).
11. Cardiovascular Sciences Section Seminar, Department of Medicine, Baylor College of Medicine, Houston, TX. (Feb 2006).
12. "Integrated Modeling of Post-Myocardial Infarction Fibroblast Activation." 2006 Seminars in Basic and Clinical Investigation Seminar Series at The University of Texas Health Science Center at San Antonio, TX. (Sept 8, 2006).
13. "Integrated Modeling of Post-Myocardial Infarction Fibroblast Activation." The Department of Medicine Research Seminar Series, The University of Texas Health Science Center at San Antonio, TX. (Sept 19, 2006).
14. "Integrated Modeling of Post-Myocardial Infarction Fibroblast Activation." The University of Texas at San Antonio, Minority Biomedical Research Support (MBRS) and Minority Access to Research Careers (MARC) Fall 2006 Seminar Series. (Oct 20, 2006).
15. "Integrated Modeling of Post-Myocardial Infarction Fibroblast Activation." Biology Department Seminar, St. Mary's University, San Antonio, TX. (Oct 27, 2006).
16. "Extracellular Matrix Remodeling: Causes and Consequences." Department of Pediatrics Research Seminar Series, The University of Texas Health Science Center at San Antonio, TX. (March 1, 2007).
17. "Extracellular Matrix Remodeling: Causes and Consequences." IBT Information Exchange Seminar, Institute of Biosciences and Technology, Texas A&M University Health Science Center, Houston, TX. (March 2007).
18. "Modeling Fibroblast Activation to Improve Outcomes Post-MI." Cardiology Research Seminar, University of Texas Health Science Center at Houston, Houston, TX. (Sept 2007).
19. "Using a Portfolio to Document Excellence in Teaching." 2007 Cellular and Structural Biology Retreat, UTHSCSA, San Antonio, TX. Presented on why we need to document excellence in teaching and how we can do this using a teaching portfolio. (Sept 2007).
20. "Knowing What You Want." Women's Faculty Association General Meeting, UTHSCSA, San Antonio, TX. Presented on how to create a career development agenda. (Oct 2007).
21. "The Importance of Networking." Healthcare Businesswomen's Association, San Antonio Affiliate. Presented on how my support network has been important in my career and how the HBA has contributed to my networking. (Jan 24, 2008).
22. "Navigating the Extracellular Matrix Complexity of Left Ventricular Remodeling." UCSD Cardiology Research Seminar, San Diego, CA. (April 2008).
23. "Extracellular Matrix Mechanisms of Cardiac Aging." Sam and Ann Barshop Institute for Longevity and Aging Studies Research Seminar, UTHSCSA, San Antonio, TX. (Sept 2008).
24. "Navigating the Extracellular Matrix Complexity of Left Ventricular Remodeling." University of Pittsburgh Cardiology Grand Rounds, Pittsburgh, PA. (Oct 2008).
25. "Negotiation: Knowing Now What I Didn't Know Then." Co-Presented with Dr. Martha Medrano, Women's Faculty Association General Meeting, UTHSCSA, San Antonio, TX. (Feb 2009).
26. "Academic Medicine/ Research," Discussion Leader. 1st Annual Career Development Day for UTHSCSA MSIII Students. San Antonio, TX (April 14, 2009).
27. "Navigating the Extracellular Matrix Complexity of Left Ventricular Remodeling." Department of Physiology, James H. Quillen College of Medicine, East Tennessee State University, Johnson City, TN. (May 2009).
28. "LV Remodeling in Aging and Infarction." Cardiovascular Sciences, Department of Medicine, Baylor College of Medicine, Houston, TX. (Aug 2009).
29. "Using Systems Biology Approaches to Understand Extracellular Matrix Remodeling." Cardiology Division, Department of Medicine, The Johns Hopkins University School of Medicine, Baltimore, MD. (Sept 2009).
30. "Role of Periodontal Disease in Post-Myocardial Infarction Remodeling." The Max and Minnie Tomerlin Voelcker Fund Trustees. (Oct 2009).
31. "Measuring Cardiac Healthspan." Lifespan and Healthspan Extension in Aging Research: When Is It Real and How Can We Be Certain? Bandera Conference, Barshop Institute. (Oct 2009).
32. "Aging and the Heart." National Conference of State Legislatures, Legislators in the Lab. UTHSCSA (Nov 2-3, 2009).

33. "How I Became a Cardiovascular Scientist." Presented to 355 7th grade science students at Driscoll Middle School, San Antonio, TX, as part of the American Physiological Society, Physiology Understanding (PhUN) Week.
34. "Collagen and Cardiac Repair." Post-Infarct Remodeling: Contribution of Wound Healing (evening seminar). American Heart Association Scientific Sessions. (Nov 2009).
35. "How to be a good mentor to your students." Women's Faculty Association General Meeting, UTHSCSA, San Antonio, TX. (Jan 2010).
36. "Novel Strategies in Cardiovascular Extracellular Matrix Proteomics." Department of Cell Biology and Anatomy, University of South Carolina, Columbia, SC. (April 2010).
37. "Extracellular matrix causes and consequences of infarct remodeling." Feature Topic Session: Extracellular Matrix and Pathology of Cardiovascular Disease. Experimental Biology Meeting. (April 2010).
38. "Three Pieces of Advice for Your Career." Women's Faculty Association Student Leadership Award Ceremony, UTHSCSA, San Antonio, TX. (May 2010).
39. "Using Extracellular Matrix Proteomic Approaches to Understand Left Ventricular Remodeling." Biochemistry Department, University of South Alabama School of Medicine. (June 2010).
40. "MMP-9 Regulation of Cardiac Remodeling." The Child Health Research Center Seminar Series, The Research Institute at Nationwide Children's Hospital, Ohio State University. (July 2010).
41. "Novel Therapeutic Strategies for the Post-MI Patient." Internal Medicine Grand Rounds, University of South Alabama School of Medicine. (September 2010).
42. "MMP-9 Regulation of Cardiac Remodeling." Department of Physiology Seminar Series, University of Louisville School of Medicine. (September 2010).
43. "Using extracellular matrix proteomics to understand cardiac remodeling." Cardiovascular Research Center Seminar, Massachusetts General Hospital, Boston, MA. (October 2010).
44. "How to measure ECM globally." How to Profile the Extracellular Matrix: Tools and Strategies Session at the American Heart Association Scientific Sessions, Chicago, IL. (November 2010).
45. "Left Ventricular Adaptations to Chronic and Intermittent Hypoxia." Department of Integrative Physiology Seminar Series, University of North Texas Health Science Center, Ft. Worth, TX. (December 2010).
46. "Using ECM-Specific Microarrays and Proteomics to Gain Insight into Cardiac Remodeling Post-Myocardial Infarction." Extracellular Matrix and Cardiovascular Remodeling Keystone Symposium, Tahoe, CA. (January 2011).
47. "Post-MI Remodeling from the Extracellular Matrix View." Texas A&M Health Science Center, Division of Molecular Cardiology, Temple, TX. (February 2011).
48. "Multi-dimensional approaches to study cardiac extracellular matrix remodeling." New York University, Cardiology Division Research Seminar, New York City, NY. (February 2011).
49. "Multi-dimensional approaches to study cardiac extracellular matrix remodeling." Cardiovascular Basic Science Seminar, Texas Heart[®] Institute at St. Luke's Episcopal Hospital, Houston, TX. (April 2011).
50. "Personalized Medicine in the Era of Omics – Genomics, Epigenomics, Proteomics, Metabolomics." (panel discussion) Department of Medicine Research Day. (May 2011).
51. "Post-MI Remodeling from the Extracellular Matrix View." Cardiovascular Research Center and the Department of Physiology, Temple University School of Medicine, Philadelphia, PA. (May 2011).
52. "Cardiac Remodeling from the Extracellular Matrix View." Department of Physiology and Biophysics, University of Mississippi Medical Center, Jackson, MS. (August 2011).
53. "Cardiac Remodeling from the Extracellular Matrix View." Barshop Institute for Aging and Longevity Studies, UTHSCSA, San Antonio, TX. (September 2011).
54. "Using Extracellular Matrix Proteomic Strategies to Understand Cardiac Remodeling Post-MI." Distinguished Lectureship of Proteomic Science at UCLA, Los Angeles, CA. (September 2011).
55. "Establishing Collaborations/ Leading a Successful Research Laboratory." KL2 Seminar, UTHSCSA, San Antonio, TX (September 2011). *This lecture was given to the KL2 scholars that are part of our CTSA training program. Of 7 attendees, the evaluation score was 1.17±0.31 (1=best; 5=worst).*
56. "Novel Strategies Targeting the Cardiac Extracellular Matrix." Department of Pharmacology and Toxicology, Maastricht University, Maastricht, Netherlands. (October 17, 2011).
57. "Novel Strategies Targeting the Cardiac Extracellular Matrix." Klinik und Poliklinik für Herzchirurgie, Universitätsklinikum Bonn, Bonn, Germany. (October 19, 2011).
58. "Novel Strategies Targeting the Cardiac Extracellular Matrix." ICCAD 2011 - the 9th International Congress on Coronary Artery Disease, Venice, Italy. (October 25, 2011).
59. "Extracellular Matrix Proteomics and Cardiovascular Remodeling." Department of Molecular Pathology. Università degli Studi di Urbino, Urbino, Italy. (October 27, 2011).
60. "Using extracellular matrix proteomic strategies to understand cardiac remodeling post-MI." Wilf Family Cardiovascular Research Institute, Albert Einstein College of Medicine, New York, NY. (November 8, 2011).
61. "Cardiac Remodeling from the Extracellular Matrix View." Department of Molecular Medicine, UTHSCSA, San Antonio, TX. (December 13, 2011).

62. "Cardiac Wound Healing from the Extracellular Matrix View." San Antonio Wound Healing Group Seminar Series, Southwest Research Institute, San Antonio, TX. (January 19, 2012).
63. "Cardiac Remodeling from the Extracellular Matrix View." Department of Physiology, Loyola University Health Sciences Center, Chicago, IL. (March 23, 2012).
64. Cardiac Remodeling from the Extracellular Matrix Perspective." Department of Medicine Research Series, UTHSCSA, San Antonio, TX. (March 27, 2012).
65. "Tips for Thriving in a Scientific Career." Trainee Meetings Outside the Box (TMOB) Seminar Series, UTHSCSA, San Antonio, TX. (April 11, 2012).
66. "Using Proteomics to Identify Novel Extracellular Matrix Mechanisms of Cardiac Remodeling." Third Wenzhou International Diabetic Complication Forum. Chinese-American Research Institute for Diabetic Complications, Wenzhou Medical College, Wenzhou, Zhejiang, China. (May 1, 2012).
67. "Cardiac Remodeling from the Extracellular Matrix Perspective." The Center for Cardiovascular Research, University of Illinois at Chicago, Chicago, IL. (May 18, 2012).
68. "The Extracellular Matrix in Cardiac Remodeling During Aging and Disease." Gerontology Division, Department of Medicine, Fourth Military Medical Institution, Xi'an, China. (June 2012).
69. "The Heart of Aging." Barshop Institute for Aging and Longevity Studies, UTHSCSA, San Antonio, TX. (June 2012).
70. "Cardiac Remodeling from the Extracellular Matrix View." Cardiology Division, UCSD, San Diego, CA. (July 2012).
71. "Cardiac Remodeling from the Extracellular Matrix View." The Hopkins Bayview Proteomics Centre, Johns Hopkins University, Baltimore, MD. (August 2012).
72. "Cardiac Remodeling from the Extracellular Matrix View." Physiology Department, University of Alberta, Edmonton, Canada. (August 2012).
73. "Lead-Header-Ship: Leveraging your career to match your authentic self." (panel discussion) Healthcare Businesswomen's Association, San Antonio Chapter, San Antonio, TX. (September 2012).
74. "Session III: Cardiopulmonary." (individual speaker and panel discussion). Mouse Healthspan: Why Lifespan is No Longer Enough. 2012 San Antonio Nathan Shock Center Conference on Aging. (October 2012).
75. "Extracellular Matrix Roles in Cardiac Remodeling." Physiology Department, School of Medicine, LSU Health New Orleans, New Orleans, LA. (October 2012).
76. "Exploring the Cardiac Extracellular Matrix." Riley Heart Center Seminar Series Mini-Symposium. Herman B Wells Center for Pediatric Research, Indiana University School of Medicine. (April 2013).
77. "Exploring the Cardiac Extracellular Matrix." Department of Biochemistry, University of Mississippi Medical Center, Jackson, MS. (May 2013).
78. "Writing Successful NIH Grants." Office of Research Training Series, University of Mississippi Medical Center, Jackson, MS. (May 2013).
79. "Proteomic Strategies to Identify Novel Extracellular Matrix Biomarkers of Cardiac Injury." Biotec Open Forum: New Technology and Innovative Approaches in Biomarker Development. 2013 AAPS National Biotechnology Conference, San Diego, CA. (May 2013).
80. "Proteomic Strategies to Identify Novel Extracellular Matrix Biomarkers of Cardiac Injury." Department of Pharmacology, University of Mississippi Medical Center, Jackson, MS. (June 2013).
81. "Cardiac Extracellular Matrix Remodeling Following Myocardial Infarction." Department of Physiology and Biophysics, University of Mississippi Medical Center, Jackson, MS. (June 2013).
82. "Proteomic Strategies to Identify Novel Extracellular Matrix Biomarkers of Cardiac Injury." Department of Pharmacology and Toxicology, University at Buffalo, The State University of New York, Buffalo, NY. (July 2013).
83. "Using Proteomics to Dissect Extracellular Matrix Remodeling Following Myocardial Infarction." Cardiology Department, Fuwai Hospital, Beijing, China. (August 2013).
84. "Using Proteomics to Dissect Extracellular Matrix Remodeling Following Myocardial Infarction." Featured faculty, Cardiovascular Pathology Forum Session I, China Heart Congress, Beijing, China. (August 2013).
85. "Proteomic strategies to identify novel extracellular matrix biomarkers of cardiac injury." 24th Annual Vascular Biology and Hypertension. Birmingham, AL. (September 2013).
86. "Milestones in Myocardial Remodeling Research." IBT Distinguished Lecturer Series. Texas A&M Health Science Center Institute of Biosciences and Technology. Houston, TX. (December 2013).
87. "Cardiac Remodeling: Risks and Relationships." Physiology in Medicine Series, Department of Physiology and Biophysics, UMMC. Presented the translational aspects, while Dr. Michael Hall presented the clinical aspects of cardiac remodeling research. (January 2014).
88. "MouseMonitor S Webinar." Webinar meeting hosted by Indus Instruments to discuss their mouse monitor. This was a panel presentation, and I gave a 10 minute overview of how our lab uses the mouse monitor. (January 2014).
89. "Proteomic strategies to identify novel extracellular matrix biomarkers of cardiac injury," Frontiers in Pharmacology Seminar, Department of Pharmacology, UC Davis. Davis, CA. (April 2014).
90. "Leukocytes in Acute Myocardial Infarction," Hematopoietic Stem Cells Give Rise to Inflammation in Cardiovascular Disease Symposium, FASEB. San Diego, CA. (April 2014).

91. "Diabetic Complications of Post-MI Remodeling," 5th Chinese-American Diabetic Complication Forum, Chinese-American Research Institute for Diabetic Complications at Wenzhou Medical University. Rui-An, China. (May 2014).
92. "Cardiac Wound Healing after a Heart Attack," National Association of Biology Teachers Annual Conference. Cleveland, OH. (Nov 2014).
93. "Proteomic strategies to identify extracellular markers of cardiac injury," Division of Cardiovascular Disease, University of Alabama. Birmingham, AL. (Jan 2015).
94. "Proteomic strategies to identify extracellular markers of cardiac injury," Department of Cell Biology and Anatomy, University of South Carolina School of Medicine, Columbia, SC. (Feb 2015).
95. "Jackson Heart Study and Omics Data Analyses," NIH Big Data to Knowledge (BD2K) PI meeting, University of California at Los Angeles, Los Angeles, CA. (Feb 2015).
96. "Proteomics of Post-Infarct Extracellular Matrix Remodeling," Cell Biology of the Heart: Beyond the Myocyte-Centric View Keystone Symposium. Copper Mountain, CO. (March 2015).
97. "Biomarkers to cardiac extracellular matrix," HUPO Workshop on Cardiovascular Disease. Proteomic Forum. Berlin, Germany. (March 2015).
98. "MMPs and TIMPs: Novel Inhibitors," HFA Workshop on Fibrosis, European Society of Cardiology, Brussels, Belgium. (March 2015).
99. "Extracellular matrix- cardiac fibroblast communication," Experimental Biology ASPET Symposium on Cardiac Fibroblasts: Fair-weather Friends in Myocardial Fibrosis and Repair, Boston, MA. (March 2015).
100. "Proteomic strategies to identify extracellular markers of cardiac injury," Cardiology Division, Vanderbilt University School of Medicine, Nashville, TN. (April 2015).
101. "Strategies to identify extracellular markers of cardiac injury," Robert M. Berne Cardiovascular Research Center and the Biomedical Engineering Department, University of Virginia, Charlottesville, VA. (April 2015).
102. "Matrix Metalloproteinase-9 Mediated Mechanisms of Post-MI Remodeling." *Third Forum to Promote Young Investigators and Centers of Excellence in Cardiovascular Research*. Annual Meeting of the International Academy of Cardiovascular Sciences: North American Section. Omaha, NE. (September 2015).
103. "Strategies to identify extracellular markers of myocardial infarction." Molecular and Cellular Biology & Pathobiology Program, Department of Medicine, Cardiology Division, Medical University of South Carolina, Charleston, SC. (October 2015).
104. "Extracellular Matrix and Healing After Myocardial Infarction." in CVS.212 Cardiovascular Seminar: Early Wound Healing After Myocardial Infarction: Concepts, Players, Treatment Options. Scientific Sessions. Orlando, FL. (November 2015).
105. "Extracellular Matrix Remodeling Following Cardiac Injury." Basic Medical Sciences Seminar Series, The University of Arizona, College of Medicine, Phoenix, AZ. (December 2015).
106. "Cardiac Fibrosis" NIH/NHLBI Workshop on *Refining Current Scientific Priorities and Identifying New Scientific Gaps in HIV-related Heart, Lung, and Blood Research*, Bethesda, MD. (December 2015).
107. "BD2K Training Update," Big Data To Knowledge PI meeting, EMBL, Cambridge, UK (February 2016)
108. "The crossroads between cardiac inflammation and fibrosis," Institute of Cardiovascular Sciences, University of Manchester, Manchester, UK. (February 2016)
109. "The crossroads between cardiac inflammation and fibrosis," Department of Physiology, University of Tennessee Health Science Center, Memphis, TN. (April 2016)
110. "The crossroads between cardiac inflammation and fibrosis," Dalton Cardiovascular Research Center and Department of Medical Pharmacology and Physiology, University of Missouri, Columbia, MO. (April 2016)
111. "The crossroads between cardiac inflammation and fibrosis," Department of Pharmacology & Toxicology Seminar Series (joint w/ Department of Physiology), East Carolina University, Greenville, NC. (May 2016)
112. "The crossroads between cardiac inflammation and fibrosis," Distinguished Lecture Series, University of Washington, Seattle, WA. (May 2016)
113. "As The Tides Turn: Inflammation and Fibrosis in Cardiac Wound Healing", Department of Physiology and Biophysics, University of Mississippi Medical Center, Jackson, MS. (June 2016)
114. "Cardiac Remodeling: Risks and Relationships", joint presentation with Dr. Michael Hall, Summer of Research Lecture Series, Medical Student Summer Research Program, University of Mississippi Medical Center, Jackson, MS. (June 2016)
115. "The crossroads between cardiac inflammation and fibrosis", Department of Physiology, University of Wuerzburg, Wuerzburg, Germany. (July 2016)
116. "The crossroads between cardiac inflammation and fibrosis", Institute for Cardiovascular Prevention University Hospital Munich, Ludwig-Maximilians-University Munich, Munich, Germany. (July 2016)
117. "Proteomics of the Cardiac Extracellular Matrix", FASEB Summer Conference on Matricellular Proteins in Development, Health, and Disease, West Palm Beach, FL. (July 2016)
118. "The crossroads between inflammation and fibrosis", Cardiovascular Science at the Cutting Edge, AJP Heart and University of Nebraska Medical Center, Omaha, NE. (September 2016)

119. "The crossroads between cardiac inflammation and fibrosis", Departments of Cell Biology and Pathology, Louisiana State University Health Science Center, Shreveport, LA. (October 2016)
120. "The crossroads between cardiac inflammation and fibrosis", American Society for Matrix Biology Biennial Meeting, St. Petersburg, FL. (November 2016)
121. "The 3 R's of Gender Equity", GWIMS, UMMC, Jackson, MS. (January 2017)
122. "Extracellular Matrix Roles in Cardiac Wound Healing", Physiology Department, Baylor College of Medicine, Houston, TX. (February 2017)
123. "Extracellular Matrix Roles in Cardiac Wound Healing", Physiology Department, University of Arizona, Phoenix, AZ. (March 2017)
124. "Extracellular Matrix Roles in Cardiac Wound Healing", Physiology Department, Medical College of Georgia, Augusta, GA. (March 2017)
125. "Extracellular Matrix Roles in Cardiac Wound Healing", Department of Physiology and Biophysics, UMMC, Jackson, MS. (May 2017)
126. "Extracellular Matrix Roles in Cardiac Wound Healing", Cardiovascular Center, Medical College of Wisconsin, Milwaukee, WI. (May 2017)
127. "MMP-12 is an inflammation resolution promoting factor". Special Cardiovascular Symposium: Discovery Science to Clinical trials, Institute of Cardiovascular and Medical Science, BHF Centre of Research Excellence, British Heart Foundation Glasgow, Cardiovascular Research Centre, Glasgow, Scotland. (June 2017)
128. "MMP-12 is an inflammation resolution promoting factor". American Heart Association Basic Cardiovascular Sciences Summer Conference, Portland, Oregon. (July 2017)
129. "Matrix metalloproteinase mechanisms of cardiac wound healing". VA Brain-Heart Multisite Consortium Meeting, Columbia, SC. (July 2017)
130. "ECM roles in post-myocardial infarction wound healing". University of South Dakota, Vermillion, SD (September 2017)
131. "What Will Drive CV Therapy in the Next 10 Years: Genotype or Phenotype". 20th Cardiology Fiesta, San Antonio, TX (September 2017)
132. "Physiologist as Evaluator: Pros and Cons of a Shared Perspective". American Evaluators Association, Washington, DC (November 2017)
133. "Macrophage - Mediated Regulation of Cardiac Fibroblast". American Heart Association Scientific Sessions, Anaheim, CA (November 2017)
134. "ECM Roles in Post-Myocardial Infarction Wound Healing". Cedars Sinai Medical Center, Los Angeles, CA (November 2017)
135. "The Physics of an Academic Career". Cedars Sinai Medical Center, Los Angeles, CA (November 2017)
136. "ECM Roles in Post-Myocardial Infarction Wound Healing". Baker Institute, Melbourne, Australia (December 2017)
137. "The crossroads between cardiac inflammation and fibrosis". Cardiology, Washington University, St. Louis, MO (February 2018)
138. "MMP regulation of cardiac wound healing following myocardial infarction". New Frontiers in Cell Death Signaling and Heart Failure, Honolulu, HI (February 2018)
139. "Cardiac Wound Healing Following Myocardial Infarction". University of Nebraska Medical School, Omaha, NE (March 2018)
140. "The Flight Safety Briefing for Your Career". Bodil M. Schmidt-Nielsen Award Lecture, American Physiological Society, Experimental Biology, San Diego (April 2018)
141. "Cardiac Wound Healing Following Myocardial Infarction". Department of Physiology and Biophysics, University of Mississippi Medical Center, Jackson, MS (May 2018)
142. "Grantsmanship for outstanding collaborative research". Department of Pathology Research Day, University of Mississippi Medical Center, Jackson, MS (May 2018)
143. "The crossroads between cardiac inflammation and fibrosis". 1st Olympiad in Cardiovascular Medicine: International Symposium on Experimental and Clinical Cardiology, Athens, Greece (May 2018)
144. "Cardiac fibroblast polarization". International Academy of Cardiovascular Sciences 2018 North American Section Meeting, Havana, Cuba (June 2018)
145. "Cardiac Wound Healing Following Myocardial Infarction". Cardiology, Johns Hopkins University School of Medicine, Baltimore, MD (June 2018)
146. "Directly Targeting Inflammation: Impact of Targeted Interleukin-1 Beta Therapy". Cardiology Fiesta, San Antonio, TX (August 2018)
147. "Macrophage Polarization Following Myocardial Infarction". UAB Comprehensive Cardiovascular Center 2018 Symposium: Focus on Heart Failure. Birmingham, AL (September 2018)
148. "Important Aspects of Rigor & Reproducibility in CV Research". AJP-Heart and Circulatory Physiology Cardiovascular Research Symposium and Editorial Retreat. Omaha, NE (October 2018)
149. "The Matrix at the Crossroads of Ventricular Remodeling". AHA Scientific Sessions, Chicago, IL (November 2018)

Sessions Moderated and Organized

1. Organized and moderated: "Ask the Experts: Extracellular Matrix Effects on Cardiac Remodeling" Session at the American Heart Association Scientific Sessions, New Orleans, LA. (November 10, 2008).
2. Co-chaired the featured topic "Matrix Metalloproteinases in Mitochondrial, Cytoskeletal, and Nuclear Remodeling" for the Experimental Biology Meeting, Anaheim, CA. (April 2010).
3. Organized and co-moderated the Daytime Seminar Session, "Challenging Issues in Cardiac Fibrosis: Are Fibroblasts Pharmacologic Targets in LV Remodeling?" at the American Heart Association Scientific Sessions, Chicago, IL. (November 15, 2010).
5. Co-chaired the featured topic "ECM-Cardiomyocyte Signaling in Heart Disease" for the Experimental Biology Meeting, Washington, D.C. (April 2011).
6. Organized and Chaired the "Physiology InFocus: Physiology in Medicine. Using Physiology to Translate Cardiac Remodeling and Heart Failure" Symposium for the Experimental Biology Meeting, San Diego, CA (April 2012).
7. Organized and Chaired the "Targeted Proteomic Analyses of Heart Failure" Feature Topic for the Experimental Biology Meeting, American Physiological Society, Cardiovascular Section, San Diego, CA (April 2012).
8. Moderated a group panel discussion on "Proteomics/ Drug Discovery." Biotalk Session: 2013 AAPS National Biotechnology Conference, San Diego, CA. (May 2013)
9. Co-chaired the "Hematopoietic Stem Cells Give Rise to Inflammation in Cardiovascular Disease Symposium," FASEB. San Diego, CA. (April 2014).
10. Chaired the "Young Investigator Morning Session" at the Joint Metabolomics/Proteomics Workshop in Baltimore, MD. (June 13, 2014).
11. Moderated the Session, "Cardiac Non-Myocytes in Tissue Structure and Function in the Adult Heart" for the Cell Biology of the Heart: Beyond the Myocyte-Centric View Keystone Symposium. Copper Mountain, CO (March 2015)
12. Moderated the Session, "Big Data Workshop" for the American Physiological Society, Experimental Biology. Boston, MA. (March 2015).
13. Moderated the "Proteomics for the Physiologist" Workshop for the American Physiological Society, Experimental Biology. Boston, MA. (March 2015).
14. Co-moderated the Symposium "Sex-specific cardiac regulation by sex hormones", International Conference of Physiological Sciences, Beijing, China. (September 2016).
15. Co-moderated the Symposium "ECM in Cardiovascular Disease", American Society for Matrix Biology, St. Petersburg, FL. (November 2016)
16. Breakout session leader, VA Brain-Heart Multisite Consortium Meeting, Columbia, SC. (July 2017)
17. Moderator, CE.RFO.41- Mechanisms of Ventricular Remodeling. American Heart Association Scientific Sessions, Anaheim, CA (November 2017)
18. Moderator, Inflammation (Non-Ischemic) HFrEF. Keystone Meeting- Heart Failure: Crossing the Translational Divide, Keystone, CO (January 2018)
19. Chair, Cell Signaling, Inflammation, and Regeneration Session, 2nd New Frontiers in Cell Death Signaling and Heart Failure Meeting, Honolulu, HI (February 2018)
20. Co-Chair, American Journal of Physiology Heart and Circulatory Physiology Editors Symposium, Cardiovascular Section, American Physiological Society, Experimental Biology, San Diego, CA (April 2018)

Conferences Organized

- Co-organized the Keystone Symposium, "Extracellular Matrix and Cardiovascular Remodeling (B2)", Granlibakken Resort, Tahoe City, CA. (January 23-28, 2011). *This included all organization, including successful funding of an R13 grant; giving a talk and co-moderating one session; serving as a panel member of the career development workshop; and providing introductory and concluding remarks.*
- Co-organized the ASMB Workshop, "Fibroblasts: the Arbiters of Matrix Remodeling", University of Virginia, Charlottesville, VA (June 23-25, 2019). *This included all organization; giving a talk and serving as a panel member of the career development workshop; and providing introductory and concluding remarks.*

Roundtable Discussions:

- The ABCs of Interviewing: Skills to hire the best. Member of 3 panel discussion session sponsored by the GWIMS "Coffee Talk" junior women's faculty group and MS Center for Heart Research. UMMC, Jackson, MS. (March 2016)

Interviews:

- Interviewed by Yael L. Maxwell for the article, "Protein-Based Risk Score Shows Potential for Tailored Medicine in Cardiology" for tctMD/the heart beat (<https://www.tctmd.com/news/protein-based-risk-score-shows-potential-tailored-medicine-cardiology>)

Social Media:

1. Facebook name: merrylindsey-professional Twitter name: @merrylindseyphd Skype name: merrylindsey
Linked In: >2,000 connections
2. Established the CV-ECM Linked in group (http://www.linkedin.com/groups?gid=3775394&trk=hb_side_g), which currently has >140 international research members. The purpose of the Cardiovascular Extracellular Matrix Group is to provide a forum for researchers to share ideas, protocols, and resources that will propel our field forward
3. Filmed a commercial for our proteomics center that was placed on YouTube: [SA CV Proteomics video](#) – this commercial has been seen by >1000 viewers.
4. Coined the hashtag #ECMatrix that the ECM community now uses to share information.
5. Filmed a video on MCHR: [MCHR video](#)
6. Podcasts for AJP Heart:

As Author:

December 17, 2012- [MMPs: Milestones, Myths, and \(Mis\)Perceptions](#)
 March 15, 2017- [Macrophage MMP-9 Accelerates Cardiac Aging](#)
 February 6, 2018- [Guidelines on Antibody Use in Physiology Studies](#)
 March 13, 2018- [Guidelines for Measuring Cardiac Physiology in Mice](#)
 March 23, 2018- [Guidelines for Experimental Models of Myocardial Ischemia and Infarction](#)

As Deputy Editor:

February 12, 2014- [Release Kinetics of Circulating Cardiac Myosin Binding Protein-C Following Cardiac Injury](#)
 March 13, 2014- [MMP-2 is Localized to the Mitochondria-Associated Membrane of the Heart](#)
 July 25, 2014- [Deformation Causes Vascular Alignment During Angiogenesis](#)
 August 19, 2014- [TIMP-4 and Left Ventricular Pressure Overload](#)
 September 15, 2014- [DDR2 Deletion in the Heart](#)
 January 22, 2015- [Diet, Sex and Exercise in Mice](#)
 April 7, 2015- [Cardiac Mineralocorticoid Receptors Diastolic Dysfunction](#)
 May 12, 2015- [TTD Reverses Human Cardiac Myofibroblast Activation](#)
 July 21, 2015- [Exercise and Chemoreflex Control of Renal Blood Flow in Chronic Heart Failure](#)
 August 28, 2015- [Ventricular Arrhythmias and Fibrosis in Mice](#)
 November 17, 2015- [Clock Dysfunction Triggers Fibrotic Response in the Heart](#)
 December 8, 2015- [Calpastatin Overexpression Impairs Post-MI Scar Healing](#)
 November 1, 2016- [TNF and Cardiac Stem Cell Differentiation](#)
 August 30, 2017- [Hypoxia Inducible Factor-alpha and Cancer Cachexia](#)
 January 3, 2018- [NRG-1 Inhibits Macrophage Activation During Tissue Fibrosis](#)
 February 8, 2018- [mTOR Prevents Ferroptosis in Cardiomyocytes](#)
 March 7, 2018- [Temporal Dynamics of Acute and Chronic Heart Failure](#)
 June 4, 2018- [Preclinical Echocardiography: Training and Guidelines](#)
 August 8, 2018- [Fibroblast Phenotypic Changes in the Aging Heart](#)
 October 19, 2018- [Statistical Considerations in Reporting Cardiovascular Research](#)

7. Blogs

The flight safety briefing for your career. <https://blog.lifescitrc.org/mentoringforum/2018/09/11/the-flight-safety-briefing-for-your-career/>

B. Areas of Research Interest:**MISSION STATEMENT**

My laboratory is dedicated to performing cardiovascular research that involves:

1. **Developing multidimensional approaches to examine the mechanisms whereby the left ventricle responds to injury;**
2. **Applying the knowledge gained to develop therapeutic strategies to prevent, slow, or reverse the progression to heart failure; and**
3. **Disseminating our results to general, scientific, and medical communities.**

Active Research Support:**1. NATIONAL**

- Source:** NIH/ NHLBI 2 R01 HL075360
Title: **Systems Biology of Macrophage Polarization Following Myocardial Infarction**
Period: August 15, 2015 to May 31, 2019 (first funded July 1, 2004)
Direct Costs/ Current: \$250,000 Year/ Total: 4/ \$1,525,000 Role: Principal Investigator
- Source:** NIH/ NHLBI 1 R01 HL129823
Title: **Systems Biology of Fibroblast Activation Following Myocardial Infarction**
Period: May 1, 2016 to April 30, 2020
Direct Costs/ Current: \$250,000 Year/ Total: 4/ \$1,525,000 Role: Principal Investigator
- Source:** Veteran's Administration
Title: **MMP-9 Roles in the Aging Myocardial Response to Ischemia**
Period: October 1, 2009- March 31, 2019
Direct Costs/ Current \$ 222,855 Year/ Total: 8/ \$1,772,368 (Direct) Role: Principal Investigator
- Source:** NIH/NIGMS U54GM114833 (Ping, P, PI)
Title: **A Community Effort to Translate Protein Data to Knowledge: An Integrated Platform**
Period: September 29, 2014 to April 30, 2019
Direct Costs/ Current \$ 172,379 (my annual portion of directs)
Year/ Total: 4/ \$11,256,908 Role: Co-Principal Investigator (Contact PI: Peipei Ping)
- Source:** NIH/NIGMS U54GM115428 (Wilson, JG, PI)
Title: **Mississippi Center for Clinical and Translational Research**
Period: August 18, 2016 to July 31, 2021
Direct Costs/ Current \$199,148 (my portion of directs)
Year/Total: 5/ \$19,856,370 Role: Co-investigator
- Source:** NIH/NHLBI R01 HL133870 (Wilson, JG, PI)
Title: **Aptamer Proteomics of Cardiometabolic and Renal Traits in African Americans**
Period: April 1, 2017 to February 28, 2021
Direct Costs/ Current \$1,481,692 Year/Total:4/ \$4,740,098 Role: Co-investigator
- Source:** NIH/NHLBI P01 HL051971 (Hall, JE, PI)
Title: **Cardiovascular Dynamics and Their Control**
Period: August 1, 2014- May 31, 2019
Direct Costs/ Current: \$1,316,926 Year/ Total: 5/ \$10,041,560 Role: Co-Investigator
- Source:** NIH/NHLBI R01 HL137673 (Garrett, MR, PI)
Title: **Genetic Targets of Hypertension End Organ Damage**
Period: September 6, 2018 to June 30, 2022
Direct Costs/ Current: \$ 250,000 Year/ Total: 4/ \$1,550,000 Role: Co-investigator (year 1 only)
- Source:** NIH/NHLBI R01 HL136438 (Harmancey R, PI)
Title: **Molecular Basis of Postischemic Maladaptation in the Insulin Resistant Heart**
Period: April 1, 2018 to March 31, 2023
Direct Costs/ Current: \$ 250,000 Year/ Total: 5/ \$1,937,500 Role: Co-investigator (year 1 only)
- Source:** Veterans Administration 1K2BX003922 (DeLeon-Pennell, KY, PI)
Title: **T-cell regulation of cardiac remodeling**
Period: June 1, 2017 to May 31, 2022
Direct Costs/ Current: \$ 192,462 Year/ Total: 5/ \$870,855 Role: Mentor
- Source:** P20GM121334 (Reckelhoff, JF, PI)
Title: **Mississippi Center of Excellence in Perinatal Research**
Period: June 8, 2017- May 31, 2022 Role: Mentor (years 1 and 2 only)

2. UNIVERSITY- none

3. OTHER

Source: American Heart Association Postdoctoral Grant
Title: **Metabolic Dysfunction and Hypertension Effects on Post-MI Macrophage Physiology**
Period: July 1, 2018 to June 30, 2020
Direct Costs/ Current Year/ Total: \$51,844 / 2/ \$104,060 (Total) **Role:** Consultant/ Mentor (PI: Alan J. Mouton)

Source: American Heart Association Scientist Development Grant
Title: **Neutrophil polarization in post-myocardial infarction cardiac remodeling**
Period: January 1, 2015 to December 31, 2018
Direct Costs/ Current Year/ Total: \$70,000 (Total) / 4/ \$308,000 (Total) **Role:** Consultant/ Mentor (PI: Yonggang Ma)

Source: NIGMS K23
Title: **Platelet activation in septic shock**
Period: January 12, 2015 to December 31, 2018
Year/ Total: 4/ \$308,000 (Total) **Role:** Consultant/ Mentoring Committee Member (PI: Michael A. Puskarich)

Source: St. Baldrick's Foundation
Title: **Evaluation of the Long-term Cardiac Toxicity of Liposomal Doxorubicin**
Period: September 1, 2014 to August 31, 2019
Year/ Total: 5/ \$550,000 **Role:** Sponsor/ Mentor (PI: Gregory J. Aune)

Past Research Support**1. NATIONAL**

Source: NIH NRSA Fellowship F32 HL10337 **Period:** May 1, 2000 to May 31, 2003
Title: **Targeted Deletion of MMP-9 and Left Ventricular Remodeling**
Year/ Total: 3/ \$109,960 (Total) **Role:** Principal Investigator

Source: NIH NHLBI R01 HL075360 **Period:** July 1, 2004 to June 30, 2010
Title: **The Role of Macrophage-Derived MMPs in LV Remodeling**
Year/ Total: 5/ \$1,250,000 (Direct); \$1,811,200 (Total) **Role:** Principal Investigator
Supplement: NIH NHLBI R01 HL075360S1 (for high school student Elizabeth Lopez)
Period: June 1, 2007 to August 31, 2008
Direct Costs/ year: \$ 2,716
Year/ Total: 3/ \$10,716 (Direct)
Title: **The Role of Macrophage-Derived MMP-9 in LV Remodeling**
Period: July 1, 2010 to August 14, 2015
Year/ Total: 5/ \$1,250,000 (Direct); \$1,863,375 (Total) **Role:** Principal Investigator
3 Supplements: K Thomas (undergrad); N Patterson (grad); R Zamilpa, PhD (postdoc)
Award Periods: 5/1/14-4/30/15; 8/1/10-4/30/15; 9/1/11-8/30/13
Award Totals: \$17,278; \$193,644; \$168,123

Source: NIH/NHLBI **Period:** August 15, 2010 to August 14, 2015
Title: **NHLBI UTHSCSA Cardiovascular Proteomics Center**
Year/ Total: 5/ \$11,643,580 (Total) **Role:** Principal Investigator

Source: NIH/NHLBI R01 HL095852 **Period:** 3/1/2010-12/31/2015
Title: **Biomechanical mechanisms of artery tortuosity**
Year/ Total: 5/ \$1,821,770 **Role:** Co-Investigator (PI: Hai-Chao Han)

Source: NIH/NHLBI R13 HL104797 **Period:** August 1, 2010 to June 15, 2011
Title: **Extracellular Matrix and Cardiovascular Remodeling** (Keystone Meeting)
Year/ Total: 1/ \$15,000 **Role:** Co-organizer (PI: Andrew Robertson)

Source: Health Resources and Services Administration **Period:** September 1, 2010 to August 31, 2011
Title: **Center for Cardiovascular Systems Biology**
Year/ Total: 1/ \$297,000 **Role:** Principal Investigator

Source: NIH/EB 1R03 EB 009496 Period: 9/1/2010-8/31/2011
Title: **Mathematical Modeling of Matrix Metalloproteinase-9 Driven Left Ventricular Remodeling Post Myocardial Infarction**
Year/ Total: 1/ \$82,799 (Total) Role: Co-Investigator (PI: Yufang Jin, PhD)

Source: Veteran's Administration Period: September 2008- August 2012
Title: **Role of CCR5 in EPC Biology and Atherosclerosis**
Year/ Total: 4/ \$600,000 (Direct) Role: Co-Investigator (PI: Seema Ahuja)

Source: T32HL105324 (Granger, JP, PI) Period: 09/2010-08/2020
Title: **Hypertension and Cardiorenal Diseases Research Training Program**
Period: Role: Mentor

Source: NIH/NHLBI T32 HL07446 Period: 07/1990- 08/2015
Title: **Pathobiology of Occlusive Vascular Disease**
Year/ Total: 5/ \$1,018,107.00 (Direct) Roles: 2007-2013- Co-Investigator (PI: Linda McManus)
2009-2013- Associate Program Director

Source: NIH/NIA T32 AG021890-07 Period: 05/01/2003-04/30/2013
Title: **Training Grant on the Biology of Aging**
Year/ Total: 5/ \$628,580 (Annual Total) Role: 2008-2013- Co-Investigator/Mentor (PI: Steve Austad)

Source: NIH/NHLBI SC2 HL101430 Period: 9/1/2009-8/31/2012
Title: **Effects of Aging on LV Geometry and MMP-9 Expression Level**
Direct Costs/ year: \$100,000
Year/ Total: 3/ \$397,375 (Total) Role: Consultant (PI: Yufang Jin)

Source: NIH/NIA RC2 AG036613 Period: 9/30/2009-8/31/2012
Title: **Can Rapamycin Retard Age-Related Diseases?**
Year/ Total: 2/ \$2,576,662 Role: Co-Investigator (PI: Arlan Richardson, PhD)

Source: NIH/NIA P30 AG13319 Period: 9/30/09-6/30/2012
Title: **Nathan Shock Aging Center- Healthspan and Functional Core**
Year/ Total: \$259,732 Role: Co-Investigator (PI: Arlan Richardson, PhD)

Source: NIH/NCCAM K99 AT006704 Period: 8/1/11-6/30/2013 (K99 phase)
Title: **DHA Mechanisms in Obesity-Mediated Cardiac Remodeling Post-Myocardial Infarction**
Year/ Total: 2/ \$194,400 Role: Mentor (PI: Ganesh Halade, PhD)

2. UNIVERSITY

Source: The University of Texas Health Science Center at San Antonio
Translational Science Training (TST) Program
Title: **Matrix Metalloproteinase-9 (MMP-9) Roles in Cardiac Aging**
Period: 8/1/2009 – 7/31/2010
Direct Costs/ year \$33,000/ \$33,000
Year/ Total 1/ \$33,000 (Direct) Role: Mentor (Scholar: Ying Ann Chiao, Dept Biochemistry)

Source: The University of Texas Health Science Center at San Antonio Executive Research Committee
Pilot Project Grant
Title: **Extracellular Matrix Changes in Chronic and Intermittent Hypoxia**
Period: 9/1/2008 – 8/31/2009
Direct Costs/ year \$15,000 / \$15,000
Year/ Total 1/ \$15,000 (Direct) Role: Principal Investigator

Source: The University of Texas at San Antonio
Collaborative Research Seed Grant Program (CRSGP)
Title: **Why do arteries become tortuous?**
Period: 11/8/2008 – 8/31/2009
Year/ Total 1/ \$30,000 (Direct) Role: Co-PI (PI: Hai-Chao Han)

- Source:** The University of Texas Health Science Center at San Antonio
Executive Research Committee Pilot Project Grant
Title: **Age-Related Differences in Myocardial Matricryptin Profiles**
Period: 7/1/2006 – 6/30/2007
Year/ Total 1/ \$15,000 (Direct) **Role:** Principal Investigator
- Source:** The University of Texas Health Science Center at San Antonio Executive Research Committee
Pilot Project Grant
Title: **Multi-Analyte Profiling to Determine Age-Related Protein Changes in Murine Plasma Samples**
Period: 3/1/2007 – 2/29/2008
Year/ Total 1/ \$15,000 (Direct) **Role:** Principal Investigator
- 3. Other**
- Source:** American Heart Association, Texas Affiliate
Beginning-Grant-in-Aid 0665032Y
Title: **Extracellular Matrix Remodeling in the Aging Myocardium**
Period: July 1, 2006 to June 30, 2008
Year/ Total 2/ \$130,000 (Total) **Role:** Co-Investigator (PI: G. Patricia Escobar)
- Source:** Morrison Trust
Title: **Anti-inflammatory effects of dietary sulforaphane, a component in broccoli**
Period: October 1, 2008 to September 30, 2009
Year/ Total 1/ \$72,000 (Total) **Role:** Principal Investigator
- Source:** American Heart Association, South Central Affiliate
Grant-in-Aid 0855119F
Title: **Macrophage-Dependent Mechanisms of Post-Myocardial Infarction Remodeling**
Period: July 1, 2008 to June 30, 2010
Year/ Total 2/ \$140,000 (Total) **Role:** Principal Investigator
- Source:** American Heart Association, South Central Affiliate
Postdoctoral Fellowship
Title: **MMP-9 Regulation of Cardiac Fibroblast Activation Post-Myocardial Infarction**
Period: July 1, 2009 to June 30, 2011
Year/ Total 2/ \$82,000 (Direct) **Role:** Sponsor (Zamilpa, PI)
- Source:** Novartis
Title: **Role of Aliskiren/ Valsartan in Modulating MMP-9 Post-MI Remodeling**
Period: January 26, 2010- June 30, 2011
Direct Costs/ year \$176,000
Year/ Total 1/ 221,760 (Total) **Role:** Principal Investigator
- Source:** The Max and Minnie Tomerlin Voelcker Fund Young Investigator Award
Title: **Role of Periodontal Disease in Post-Myocardial Infarction Remodeling**
Period: July 1, 2009- June 30, 2014 (terminated January 13, 2013 due to re-location to Jackson, MS)
Year/ Total 5/ \$750,000 (Total) **Role:** Principal Investigator
- Source:** American Heart Association, South Central Affiliate
Grant-in-Aid 10GRNT4020024
Title: **Caveolin-1 Prevents the Development and Progression of Cardiac Remodeling**
Period: July 1, 2010 to June 30, 2012
Year/ Total 2/ \$140,000 (Total) **Role:** Co-Investigator (LeSaux, PI)
- Source:** Amylin Pharmaceuticals, Inc.
Title: **Cardiac Remodeling in a Dahl Salt Sensitive Rat Model**
Period: December 2011 to December 2012
Year/ Total 1/ \$211,450 (Total) **Role:** Co-Principal Investigator (with Ganesh Halade, PhD)

Source:	American Heart Association Postdoctoral Fellowship	
Title:	P. gingivalis primes the post-myocardial infarction remodeling response	
Period:	January 1, 2013 to December 31, 2014	
Year/ Total	2/ \$90,772 (Total)	Role: Mentor (PI: K. DeLeon)
Source:	American Heart Association Postdoctoral Fellowship	
Title:	Matrix metalloproteinase-12 Roles in Cardiac Remodeling Post-Myocardial Infarction	
Period:	January 1, 2014 to December 31, 2015	
Year/ Total	2/ \$93,704 (Total)	Role: Mentor (PI: Rugmani Padmanabhan Iyer)
Source:	American Heart Association Scientist Development Grant	
Title:	MMP-9 Generated Collagen C-peptide Roles in Post-myocardial Infarction Remodeling	
Period:	January 1, 2014 to December 31, 2017	
Direct Costs/ Current	\$70,000 (Total)	
Year/ Total	4/ \$308,000 (Total)	Role: Consultant/ Mentor (PI: Lisandra de Castro Brás)

IV. SERVICE

C. Professional Affiliations:

1. **Current Professional and Scientific Organizations and Societies (requires election or examination for membership)**

Year(s)	Organization
2012-2013	Member, American Aging Association
2017-present	Member, American Evaluation Association
1995-present	American Heart Association, Council on Basic Cardiovascular Sciences and Interdisciplinary Council on Functional Genomics and Translational Biology
	2008-2012 Fundraiser for the San Antonio Heart Walk
	2010 and 2012 \$1,000 Club member; raised >\$1,000 for the heart walk, primarily by soliciting \$25 individual donations
	2011- Fellow, Council on Basic Cardiovascular Sciences
	2012-2014 Member, Membership/ Communications Committee, BCVS Council
	2012 Fellow, Council on Functional Genomics and Translational Biology
	2013-2015 Member, Professional Education and Publications Committee, FGTVB Council
	2016 AHA Working Group on Defining Needs for Cardiovascular ECM Research
	2017, 2018 BCVS Summer Conference Abstract Grader
2001-present	American Association for the Advancement of Science
2017-8	American College of Cardiology- 67 th & 68 th Annual Scientific Session abstract grader
2004-2008	Association for Women in Science
2003-present	Federation of the American Society of Experimental Biologists
	The American Physiological Society
	2003-present Member
	2006 Minority Travel Fellow Mentor for Nildris Cruz-Dias
	2008 Minority Travel Fellow Mentor for Mesia M. Steed
	2009-2012 Nominating Committee, Cardiovascular Section
	2009-2013 APS Cardiovascular Section Programming Committee Co-Chair- Each year, my co-chair and I select 8 symposium and 9 featured topics from >40 submissions and program approximately 600 posters for the Experimental Biology meeting.
	2009-present APS Cardiovascular Section Steering Committee Member
	2009-2013 APS Joint Programming Committee, Cardiovascular Section Representative
	2010-2013 Inaugural Chair, APS Translational Physiology Interest Group Steering Committee
	2011-2012 APS Actively work to attract, meet the needs of, engage, and retain membership Task Force; Women Subgroup of the Task Force
	2012-present Fellow, CV section
	2013-2016 Chair, CV Section
	2013-2016 Member, APS Steering Advisory Committee
	2013-2016 Member, APS Nominating Committee
	2016-2017 Chair, CV Section Communications Committee
	2018 CV Section Young Investigators Symposium Judge
	American Society for Investigative Pathology

	2007-2012	Member
	American Society for Matrix Biology	
	2010-present	Member
	2016	Women Mentoring Women Breakfast Organizing Committee Chair
	2017-2020	Councilor
	2017-present	Nomination and Awards Committee
2007-2012	Healthcare Businesswomen's Association Member	
	2007	Member, Marketing and Publicity Committee
	2007-2008	Co-Chair, Women in Science Affinity Group for San Antonio
	2011	Member, Nominating Committee, San Antonio Chapter
2003-2012	Heart Failure Society of America	
2010-present	International Society of Heart Research, American Section	
2014-2015	Poster Judging at the Annual Meeting of the International Academy of Cardiovascular Sciences: North American Section Forum	
2002-2008	National Association for Female Executives	
2011-2015	Saving Tiny Hearts Society	
	2011-2015	Chair Pro Tempore, Medical Advisory Board

2. Journal Editing

Year(s)	Journal	Activity
2011-present	American Journal of Physiology- Heart and Circulatory Physiology	
	Jan 2011- present	Editorial Board
	Jan 2013- Feb 2014	Consulting Editor
	Feb 2014- Dec 2014	Associate Editor
	Jan 2015- Dec 2017	Deputy Editor
	July 2017: Call for Papers on ECM in CV Pathophysiology	Guest Editor
2016-present	Basic Research in Cardiology	Editorial Board
2018-present	Biomedicine & Pharmacotherapy (BIOPHA)	Ethics Editor
2008-2012	Cardiovascular Research	Consulting Editor
2007-present	Circulation Research	
	2007-present	Diamond Reviewer (reviewed >10 manuscripts)
	2008-present	Triage and Tie-Breaker Reviewer
	2009-2010; 2014-present	Editorial Board
	2009-named one of the best reviewers of the year	
2013-present	Comprehensive Physiology	Topic Editor, Heart
2016-present	Current Opinion in Physiology	Editorial Board
	2016-2017 Topic: Hearts (Physiology of Cardiovascular Systems)	Guest Editor
2011-present	Frontiers in Genetics of Aging	Review Editorial Board
2009-2014	Hypertension	Editorial Board
2009-present	Journal of Cardiac Failure	Editorial Board
2008-2017	Journal of Molecular and Cellular Cardiology	
	2008-2017	Editorial Board; Triage Reviewer
	2009: Special Issue on Extracellular Matrix and Cardiovascular Remodeling; with Dr. Tom Borg (published March 2010)	Guest Editor
	2014-2017	Associate Editor
	2015: Special Issue on Exploring Fibrosis as the Next Target for Myocardial Remodeling; with Dr. Burns Blaxall	Guest Editor
2011	Microscopy and Microanalysis	
	Special Issue on "Cardiovascular Extracellular Matrix;" with Dr. Tom Borg	Guest Editor
2007-present	The Open Proteomics Journal	Editorial Board
	Proteomics: Clinical Applications	
	2015 Special Issue on Tissue Damage, Repair and Regeneration	Guest Editor
2005-2010	Recent Patents on Anti-Cancer Drug Discovery	Editorial advisory board
2014-present	Biomedical Computation Review	Editorial advisory board

3. Journal Reviewing

Year(s)	Journal	Activity
2010-present	ACS Chemical Biology	Reviewer
2011-present	Acta Biomaterialia	Reviewer
2018-present	Advances in Physiology Education	Reviewer

2014-present	Ageing Research Reviews	Reviewer
2007-present	Aging Cell	Reviewer
2012-present	American Journal of Cardiology	Reviewer
2008-present	American Journal of Hypertension	Reviewer
2016-present	American Journal of Physiology- Cell Physiology	Reviewer
2005-present	American Journal of Physiology- Heart and Circulatory Physiology	Reviewer
2005-present	American Journal of Physiology- Regulatory, Integrative and Comparative Physiology	Reviewer
2011-present	The Anatomical Record	Reviewer
2010-present	Angewandte Chemie	Reviewer
2015-present	Annals of Biomedical Engineering	Reviewer
2004-present	Annals of Medicine	Reviewer
2013-present	Antioxidants and Redox Signaling	Reviewer
2008-present	Archives of Medical Research	Reviewer
2007-present	Archives of Pharmacology	Reviewer
2008-present	Atherosclerosis	Reviewer
2007-present	Arteriosclerosis, Thrombosis, and Vascular Biology	Reviewer
2015-present	Basic Research in Cardiology	Reviewer
2016-present	Beneficial Microbes	Reviewer
2008-present	Biochimica et Biophysical Acta	
	-Molecular Basis of Disease	Reviewer
	-Molecular Cell Research	Reviewer
	-General Subjects	Reviewer
	-Proteins and Proteomics	Reviewer
2006-present	Biochemical Pharmacology	Reviewer
2007-present	Biomarkers in Medicine	Reviewer
2013-present	Biomed Research International	Reviewer
2013-present	British Journal of Pharmacology	Reviewer
2007-present	Cardiology	Reviewer
2013-present	Cardiovascular & Hematological Disorders- Drug Targets	Reviewer
2005-present	Cardiovascular Drugs and Therapy	Reviewer
2011-present	Cardiovascular Pathology	Reviewer
2005-present	Cardiovascular Research	Reviewer
2010-present	ChemMedChem	Reviewer
2002-present	Circulation	Reviewer
2008-present	Circulation: Heart Failure	Reviewer
2004-present	Circulation Research	Reviewer
2015-present	Clinical Pharmacology and Therapeutics	Reviewer
2016-present	Clinical Proteomics	Reviewer
2011-present	Clinical Science	Reviewer
2013-present	Comparative Biochemistry and Physiology	Reviewer
2016-present	Current Biology	Reviewer
2009-present	Current Medicinal Chemistry	Reviewer
2017-present	Current Opinion in Physiology	Reviewer
2005-present	Current Pharmaceutical Design	Reviewer
2010-present	Cytokine	Reviewer
2015-present	Data in Brief	Reviewer
2007-present	Drug Discovery Today	Reviewer
2015-present	E-Biomedicine	Reviewer
2017-present	European Journal of Inflammation	Reviewer
2008-present	European Journal of Pediatrics	Reviewer
2008-present	European Journal of Pharmacology	Reviewer
2004-present	European Heart Journal	Reviewer
2007-present	Expert Opinion on Drug Discovery	Reviewer
2010-present	Expert Opinion on Investigational Drugs	Reviewer
2010-present	Expert Opinion on Therapeutic Targets	Reviewer
2015-present	Expert Review of Proteomics	Reviewer
2015-present	Experimental Biology and Medicine	Reviewer
2008-present	Experimental Gerontology	Reviewer
2008-present	FASEB Journal	Reviewer
2012-present	Fibrogenesis and Tissue Repair	Reviewer

2011-present	Frontiers in Bioscience	Reviewer
2011-present	Heart Failure Reviews	Reviewer
2006-present	Hypertension	Reviewer
2007-present	Hypertension Research	Reviewer
2010-present	Immunobiology	Reviewer
2011-present	Indian Journal of Biochemistry and Biophysics	Reviewer
2004-present	International Journal of Cardiology	Reviewer
2008-present	International Journal of Developmental Biology	Reviewer
2011-present	IUBMB Life	Reviewer
2008-present	Journal of the American College of Cardiology	Reviewer
2016-present	JACC: Basic to Translational Science	Reviewer
2017-present	Journal of the American Medical Association Cardiology	Reviewer
2011-present	Journal of Applied Physiology	Reviewer
2006-present	Journal of Biological Chemistry	Reviewer
2002-present	Journal of Cardiac Failure	Reviewer
2011-present	Journal of Cardiovascular Medicine	Reviewer
2008-present	Journal of Cardiovascular Pharmacology	Reviewer
2011-present		Tie-breaker reviewer
2016-present	Journal of Cellular and Molecular Medicine	Reviewer
2006-present	Journal of Dental Research	Reviewer
2008-present	Journal of Experimental Gerontology	Reviewer
2007-present	Journal of Gene Medicine	Reviewer
2008-present	Journal of Gerontology: Biological Sciences	Reviewer
2008-present	Journal of Histochemistry and Cytochemistry	Reviewer
2002-present	Journal of Molecular and Cellular Cardiology	Reviewer
2008-present	Journal of Pharmacy and Pharmacology	Reviewer
2009-present	Journal of Proteome Research	Reviewer
2011-present	Journal of Proteomics	Reviewer
2011-present	Journal of Visualized Experiments	Reviewer
2011-present	Life Sciences	Reviewer
2010-present	Matrix Biology	Reviewer
2011-present	Microscopy and Microanalysis	Reviewer
2011-present	Molecular Biology Reports	Reviewer
2008-present	Molecular and Cellular Biochemistry	Reviewer
2011-present	Molecular and Cellular Proteomics	Reviewer
2015-present	Molecular Imaging and Biology	Reviewer
2018-present	Nature	Reviewer
2017-present	Nature Communications	Reviewer
2017-present	Nature Reviews Cardiology	Reviewer
2011-present	OMICS Publishing Group/Clinical	Reviewer
2011-present	PDA Journal of Pharmaceutical Science and Technology	Reviewer
2007-present	Pharmacology and Therapeutics	Reviewer
2011-present	Physiological Genomics	Reviewer
2017-present	Physiological Reviews	Reviewer
2009-present	PLoS One	Reviewer
2013-present	Proceedings of the National Academy of Sciences	Reviewer
2015-present	Progress in Biophysics and Molecular Biology	Reviewer
2006-present	Proteomics	Reviewer
2013-present	Proteomics: Clinical Applications	Reviewer
2005-2010	Recent Patents on Anti-Cancer Drug Discovery	Reviewer
2011-present	Rejuvenation Research	Reviewer
2009-present	The Tohoku Journal of Experimental Medicine	Reviewer
2005-present	Thrombosis Research	Reviewer
2010-present	Translational Research	Reviewer
2013-present	Yonsei Medical Journal	Reviewer

Total number of manuscripts reviewed since 2007:

- 2007- 105 (8.8±2.3/ month)
- 2008- 120 (10.0±1.7/ month)
- 2009- 126 (10.5±3.0/ month)
- 2010- 56 (4.7±2.2/ month)
- 2011- 122 (10.2±4.6/ month)
- 2012- 76 (6.3±2.8/ month)

- 2013- 92 (7.7±2.5/ month)
- 2014- 93 (7.8±3.6/ month)
- 2015- 101 (8.4±2.8/ month)
- 2016- 81 (6.8±2.7/ month)
- 2017- 80 (6.7±3.0/ month)

○ **2007-2017 TOTAL: 1052 manuscripts reviewed**

Book Reviewing

2012 Book abstract review, Bentham e-books
 2013 Inflammation as an Orchestrator in Heart Failure book idea reviewer, Elsevier

Meeting Abstract Reviewing

2014 Reviewed 20 abstracts for the Joint ESH-ISH Hypertension Meeting, Athens, Greece

Grant Reviewing:

National Institutes of Health

2007	Cellular Mechanisms in Aging and Development Study Section (Oct 2007)	Temporary Member
2009	ZRG1 CVRS-B 58 Stage One Panel (Challenge Grants Panel 19; May-June 2009)	Mail Reviewer
2009	R13 Conference Grants Study Section (July-Aug 2009)	Member
2010	NHLBI ZRG1 CVRS-L(85)S ARRA: Ischemic Challenge	Member
2012	NIA Special Emphasis Panel ZAG1 ZIJ-8 (02) Stress and Aging PPG (June)	Member
2014	NIA Special Emphasis Panel Aging (program project grant)	Member
2008-2016	Myocardial Ischemia and Metabolism Study Section Feb 2009, Oct 2009, Feb 2010, June 2010 July 1, 2010- June 30, 2016 2012-2016	Temporary Member Member Vice-Chair
2015	ZHL1 CSR-G(01) Clinical Trials Review Study Section (July)	Member
2015	NIA Special Emphasis Panel ZAG1 ZIJ-8 (J2) CVD Disease in Aging PPG (September)	Member
2015	NIH/CSR AREA/R15 Study Section (November)	Member & Co-Chair
2017	NIH/NHLBI R21 Panel for RFA-HL-17-015, Bold New Bioengineering Methods and Approaches for Heart, Lung, Blood and Sleep Disorders and Diseases	Member
2017-2018	NIH/NHLBI R21 Panel for RFA HL-17-022, Maximizing the Scientific Value of the NHLBI Biorepository: Scientific Opportunities for Exploratory Research (4 cycles)	Member
2017-2018	NIH/NHLBI R01 Panel for RFA-HL-18-004 (HIV-Related HLBS Comorbidities; 2 cycles)	Member
2017	NIH/CSR Special Emphasis Panel	Member

2005-present **Department of Veterans Affairs**

- Merit Grant Review Consultant Grant Reviewer
 - National- reviewed 2 Merit grant application in 2005 (CARB) and 1 in 2007
- Merit Grant Pre-Submission Review Internal Grant Reviewer
 - South Texas Veterans Health Care System, Audie L. Murphy Memorial Veterans Hospital, San Antonio- pre-reviewed Merit grant applications: 3 (1 in 2007, 2008, 2010)
 - G.V. (Sonny) Montgomery Veterans VA Medical Center, Jackson, MS- pre-reviewed 1 Merit grant application (2017)
- Career Development Pre-Submission Review Internal Grant Reviewer
 - G.V. (Sonny) Montgomery Veterans VA Medical Center, Jackson, MS
 - reviewed pre-submission Career Development (CDA2) grant applications: 1 in 2013, 1 in 2014, 1 in 2016
 - reviewed VISN 16 Pilot grant applications: 1 in 2017

2007-present **American Heart Association** Grant Proposal Reviewer
 Western Review Consortium Committee 2B- 4/2007: 7 grants; 4/2008: 14 grants; 4/2009: 14 grants
 Regenerative Cell Biology 2- 4/2011: 11 grants; Cardiac Bio Reg- BSci 3- 4/2012: 9 grants;
 2013- 2015- chair, Cardiac Bio Reg- Bsci 6 study section
 2014-presented the 2nd half of the Spring 2014 Leaders and Staff Peer Review Processes slide set over a teleconference of AHA study section chairs and co-chairs, to review the process.
 2017-2018- member, AHA Collaborative Sciences Award Review Panel (2 panels)

2007-present **Health Research Board Ireland** Grant Proposal Reviewer
 2007 Translational Research Awards (March 2007- reviewed 1 grant)
 2016 Investigator Led Project (November 2016- reviewed 1 grant)

2012-present	Tobacco-Related Disease Research Program (TRDRP) Cardiovascular Diseases panel, University of California February 6, 2015, December 4-5, 2017, and May 1-2, 2018- reviewed 7-8 proposals each cycle and participated in panel discussion of applications	Grant Proposal Reviewer
2011-present	Netherlands -November 2011- evaluated 1 proposal in the scientific TOP programme Netherlands Organisation for Health Research and Development (ZonMw) -March 2013- evaluated 1 proposal in the Innovative Research Incentives Scheme Veni Program for the Netherlands Organisation for Scientific Research (NWO) -August 2013- evaluated 1 proposal (Vici grant) for Innovative Research Incentives Scheme for NWO -September 2013 & 2016- evaluated 1 proposal each year; NWO Division for Earth and Life Sciences	Grant Proposal Reviewer
2009	Austrian Science Fund (Oct- reviewed 1 grant)	Grant Proposal Reviewer
2005-2007	Research Management Group Philip Morris External Research Program (3 each year)	Grant Proposal Reviewer
2010-2013	James and Esther King Biomedical Research Program Research Project Grant Applications managed by the Florida Department of Health- proposals and progress reports reviewed: March 2010- 2 and 0; March 2011- 2 and 1; March 2012- 1 and 2; March 2013- 0 and 1	Grant Proposal Reviewer
2012	Deutsche Forschungsgemeinschaft (German Research Foundation) -January 2012: evaluated 1 proposal	Grant Proposal Reviewer
2012	Research Grant Council (Hong Kong) -March 2012: evaluated 1 proposal	Grant Proposal Reviewer
2012-	National Science Center (Poland) -May 2012, March 2014, January 2015: evaluated 1 proposal each time	Grant Proposal Reviewer
2012	NSERC Discovery Grant (Canada) -December 2012: evaluated 1 proposal	Grant Proposal Reviewer
2013-	Qatar National Research Fund (Qatar) -March 2013: evaluated 1 proposal; February 2014: 2 proposals; February 2015: 1 proposal	Grant Proposal Reviewer
2013-	Research Foundation (Flanders) (Fonds Wetenschappelijk Onderzoek - Vlaanderen, FWO) -June 2013: 1 proposal; July 2018: 1 proposal	Grant Proposal Reviewer
2013	European Research Council ERC Consolidator Grant- July 2013: evaluated 1 proposal	Grant Proposal Reviewer
2013	Istituto Pasteur-Fondazione Cenci Bolognetti -July 2013: evaluated 1 proposal	Grant Proposal Reviewer
2013-	Medical Research Council (United Kingdom) -November 2013, January 2013, June 2017: evaluated 3 proposals	Grant Proposal Reviewer
2013	Louisiana Board of Regents' Research Competitiveness Subprogram -November 2013: evaluated 1 proposal	Grant Proposal Reviewer
2014	Canada Networks of Centres of Excellence -July 2014; evaluated 1 proposal	Grant Proposal Reviewer
2015	Wellcome Trust Intermediate Clinical Fellowship -September 2015; evaluated 1 proposal	Grant Proposal Reviewer

2016	British Heart Foundation -June 2016; evaluated 1 Personal Chair application and 1 Programme Grant application	Grant Proposal Reviewer
2010-2012	Israeli National Strategic Research Program in Life Sciences -November 2010: reviewed 1 proposal -February 2012: reviewed 1 proposal	Grant Proposal Reviewer
2018	U.S.-Israel Binational Science Foundation -Jan 2018; evaluated 1 application	Grant Proposal Reviewer
2018	Israel Science Foundation -Jan 2018; evaluated 1 application	Grant Proposal Reviewer

Internal grant reviewing

2009-2012	UTHSCSA Grant Reviewing IIMS/ Clinical and Translational Service Award (CTSA) IIMS/ CTSA Pilot Project Applications -April 2009 and April 2012: reviewed 2 pilot grants each cycle KL2 Applications Review Panel- 4 KL2 grants (02/10); 3 KL2 grants (05/11); 5 KL2 grants (01/12) CPRIT II A	Grant Proposal Reviewer Internal Abstract Reviewer
2013	UMMC Intramural Research Support Program -September 2013: reviewed 3 grants	Internal Grant Proposal Reviewer
2014	UMMC COBRE of the Center for Psychiatric Neuroscience -September 2014: reviewed 1 grant	Internal Grant Proposal Reviewer
2005-present	Colleague Grant Reviewing -edited submissions and provided support letters for >75 colleagues	

Other Reviewing Activities

2005-present	Colleague promotion and tenure letters - have written evaluation letters for >20 colleagues
2002-present	Other letters of support (e.g., grant or permanent resident applications) >20 colleagues

1. Community Activities

- 2006-2007 Alamo Regional Science & Engineering Fair, Special Awards Judge- judged 10-15 posters each year for the Special Awards Females Junior Division, which was organized in conjunction with the UTHSCSA Women's Faculty Association.
- 2006 Science Expo volunteer- Provided a table display for the Women's Faculty Association to provide inspiration to students to pursue a career in the health professions. The expo was attended by nearly 1000 middle-school and high school students from the San Antonio area and outlying regions (Laredo, Corpus Christi, Kerrville, Marion, Snook, Cotulla, Lytle, Eagle Pass, Del Rio, Austin, San Marcos, Helotes, Bandera, Zapata, and New Braunfels).
- December 13, 2006- Was a Career Exploration Mentor to Irma Cordova, a high school senior from John F. Kennedy High School (Edgewood School District); provided her with a 2 hr tour of my laboratory and discussion of science career opportunities.
- February 3, 2007- Was a reading session volunteer for the Jr Academy of Science- reviewed student research committee forms for completeness and accuracy.
- March 14, 2007- Was an invited speaker for the Med-Ed Field Experience, which brought in 85 high school students from Laredo and other border towns to discuss career options; presented a 1 hr talk on being a cardiovascular research scientist.
- June 25, 2008- Gave a 30 min presentation on cardiovascular research for the National Conference of State Legislatures Legislators in the Lab Visit.
- July 2008- participated in a video for the local San Antonio American Heart Association Heart Walk Fundraiser.
- September 23, 2008- presented a 10 min presentation on "Cardiovascular Research at UTHSCSA" to the local San Antonio AHA board.
- March 30, 2009- presented 1 hr presentation on what it's like to be a cardiovascular research scientist to 60 10th graders at Johnson High School, as part of UT Health Science Center National Doctors' Day Community Outreach.
- October 2009- was a talent judge for the UTHSCSA Chili Cook-Off Talent Competition.
- January 2010- Expanding Your Horizons Conference in Science and Mathematics; presented to 15 middle school girls on what it is like to be a cardiovascular research scientist.
- July 2012- Scientist for a Day; hosted 6 girl scouts for a tour of the lab to show what being a research scientist is like.

- July 2013- Chair, Department of Physiology and Biophysics Heart Walk Team- our team raised \$3,165 (I raised \$1,545), ranked 7th overall
- Spring 2014- hosted Discovery U Students in my lab. This program is designed to bring local high school students from Clinton High School and Madison Central High School to the UMMC campus where they can observe and learn about biomedical research. The basic structure of the program involves the 20 students traveling to our campus where they are divided into 2 person groups to observe the functioning of a real world research laboratory in a series of three week rotations. Each visit was about 2 hours, and every third week the students rotated to a different laboratory.

D. Committees:

Department Year(s)	Committee	Member/ Officer Judge
2006	Research Day Poster Judging Committee- judged 118 posters 9 th Annual Medicine Research Day, Department of Medicine, UTHSCSA	Judge
2011	Research Day Poster Judging Committee-judged ~85 posters 14 th Annual Medicine Research Day, Department of Medicine, UTHSCSA	Judge
2007-2008	Biomedical Summer Undergraduate Research Experience (B-Sure) Program Strategic Planning Committee Biochemistry Department, UTHSCSA	Program Co-Director Member
2007-2008	Faculty Search Committee Dermatology Division, Department of Medicine, UTHSCSA	Member
2007	Cardiology Fiesta Cardiology Division, Department of Medicine, UTHSCSA	Abstract Grader
2008-2010	Committee on Graduate Studies Department of Cellular and Structural Biology	Member
2008- 2012	Research Equipment and Research Space (REARS) Allocation Committee, Department of Medicine -an ad hoc research space and equipment needs assessment committee	Member
2009-2011	Career Development Committee, Department of Cellular and Structural Biology	Member
2013-2015	Department of Physiology Seminar Series	Organizer
2014-2019	Faculty Recruitment Committee, Department of Physiology	Member
2015-2018	Promotion and Tenure Committee, Department of Physiology	Member

Qualifying Exam Committees:

<u>2005</u>	<u>Oral Qualifying Exam Committee Member</u>
Student:	Andre Ana Pena
Department:	Cellular and Structural Biology, UTHSCSA
Degree:	Ph.D.
Proposal Title:	The Contribution of Vascular Cell Senescence to Atherosclerosis in Progeria
<u>2006</u>	<u>Oral Qualifying Exam Committee Member</u>
Student:	Yong-Ung Lee
Department:	Joint Program in Biomedical Engineering, UTSA/UTHSCSA
Degree:	Ph.D.
Proposal Title:	Effects of Axial Stretch and Wall Injury on Intimal Hyperplasia in Arteries
<u>2006</u>	<u>Oral Qualifying Exam Committee Member</u>
Student:	Beili Zhu
Department:	Joint Program in Biomedical Engineering, UTSA/UTHSCSA
Degree:	Ph.D.
Proposal Title:	Establishing Atherosclerosis Occlusion in Porcine Coronary Artery

2007 Oral Qualifying Exam Committee Member

Student: Maggie M. Beranek

Department: Joint Program in Biomedical Engineering, UTSA/UTHSCSA

Degree: Ph.D.

Proposal Title: Overcoming Restenosis: A Combinational Surface to Improve Vascular Device Biocompatibility

2007 Oral Qualifying Exam Committee Member

Student: Danika Hayman

Department: Joint Program in Biomedical Engineering, UTSA/UTHSCSA

Degree: Ph.D.

Proposal Title: Pulsatile Pressure: its effect on arterial structure and function

2008 Level II Qualifying Exam Committee, Supervising Professor

Student: Michou Kelley

Department: Joint Program in Biomedical Engineering, UTSA/UTHSCSA

Degree: Ph.D.

2008 Level II Qualifying Exam Committee Member

Student: Pamela A. Colby

Department: Joint Program in Biomedical Engineering, UTSA/UTHSCSA

Degree: Ph.D.

2008 Level II Qualifying Exam Committee Member

Student: Avione Y. Northcutt

Department: Joint Program in Biomedical Engineering, UTSA/UTHSCSA

Degree: Ph.D.

2008 Oral Qualifying Exam Committee Member

Student: Chi Fung Lee

Department: Metabolism and Metabolic Disorders Track, Biochemistry, UTHSCSA

Degree: Ph.D.

Proposal Title: The Role of PLU-1 in Gene Regulation, RB/E2F Pathway and Cancers

2009 Oral Qualifying Exam Committee Member

Student: Maria Villarreal

Department: Metabolism and Metabolic Disorders Track, Biochemistry, UTHSCSA

Degree: Ph.D.

Proposal Title: Nampt Roles in Type 2 Diabetes

2009 Oral Qualifying Exam Committee Member

Student: Avione Y. Northcutt Lee

Department: Joint Program in Biomedical Engineering, UTSA/UTHSCSA

Degree: Ph.D.

Proposal Title: Determining the Critical Buckling Pressure of Blood Vessels through Modeling and In Vitro Experiments

2010 Oral Qualifying Exam Committee Member

Student: Yanan Chen

Department: Aging Track, Cellular and Structural Biology, UTHSCSA

Degree: Ph.D.

Proposal Title: Extranuclear thyroid hormone receptor regulates thyroid hormone-stimulated iNOS expression in vascular myocytes through activation of the PI3K/Akt/mTOR/HIF1 α pathway2011 Oral Qualifying Exam Committee Member

Student: Celia Macias

Department: Joint Program in Biomedical Engineering, UTSA/UTHSCSA

Degree: Ph.D.

Proposal Title: Non-Polymeric Coatings for Drug Eluting Stents

2016 Oral Qualifying Exam Round 1 Committee Member

Student: Victoria Wolf

Department: Physiology (UMMC)

2016 Oral Qualifying Exam Round 1 Committee Member

Student: Abdulhadi Alamodi

Department: Physiology (UMMC)

School

Year(s)	Committee	Member/ Officer Member
2005-2009	Medical School Admissions Committee School of Medicine, UTHSCSA 2006-2008: MD Applicant Interviewer 2009: MD/PhD Applicant Interviewer -JAMP Shiller Scholarship Application Reviewer- was 1 of 5 member committee to rank 11 applicants	
2006-2010	Annual Medical Student Research Day Poster Judging Committee School of Medicine, UTHSCSA 2006: judged approximately 10 posters 2007-2009: coordinated judging of approximately 65 student posters to select top 6 posters	Judge Chair
2006-2012	Recruiting and Faculty Resources Committee, Biology of Aging Track Graduate School, UTHSCSA	Member
2006-2011	Curriculum Committee Metabolism and Metabolic Disorders Track, Graduate School, UTHSCSA	Member
2006-2012	Recruitment Acquisition Committee MCIP Integrative Biology Track, Graduate School, UTHSCSA	Member
2007-2009	Science Symposium Judging Committee, Dental School, UTHSCSA 2007: judged 10 oral presentations for 1 st and 2 nd place prizes 2008: judged oral presentations 2009: judged 10 posters	Head Judge Judge Judge
2007-2010	Medical Student Summer Stipend Review Committee School of Medicine, UTHSCSA -committee reviewed applications for summer research: 58 applications in 2007, 52 applications in 2008, 50 applications in 2009, 62 applications in 2010.	Chair
2007-2010	MD with Distinction in Research Advisory Committee, School of Medicine, UTHSCSA 2007-2009 2009-2010 -6 members review applications and monitor student progress (15-20 applications/ year)	Committee Member Chair
2007-2008	Admissions Committee Graduate School, UTHSCSA -Metabolism and Metabolic Disorders Track Representative -Recruiting Weekend, Poster Session Subcommittee	Member Co-Chair
2007-2008	Diversity Task Force School of Medicine, UTHSCSA -Faculty Recruitment and Retention Subcommittee	Member Chair
2008-2009	Graduate School Student Advisor Graduate School, UTHSCSA -1 st year advisor to 3 students (Xiang Bai, Aimee Signarovitz and Anel Lizcano)	Member
2008-2009	XYZ Compensation Plan Committee School of Medicine, UTHSCSA -a 6 member committee to formulate the compensation plan for SOM faculty	Member
2009	National Doctors' Day- School of Medicine, UTHSCSA; Community Outreach- gave a 1 hour presentation to high school students about research career options	Speaker
2009	First Annual Medical Student Career Day School of Medicine, UTHSCSA-discussed academic career options with 3 rd year medical students	Speaker

2009-2010	MD PhD Advisory Committee Medical Scientist Training Program	Member
2010-2011	Associate Dean for Faculty Affairs Search Committee School of Medicine, UTHSCSA	Member
2011-2012	Recruitment Committee Molecular Biophysics and Biochemistry Track, Graduate School, UTHSCSA	Member
2018	Search Committee, Cardiovascular Medicine Chief Search University of Nebraska Medical Center	Member
<u>University</u>		
Year(s)	Committee	Member/ Officer
1995-1997	Graduate Student Council Graduate School of Biomedical Sciences Baylor College of Medicine	Student Representative (1995-6) Vice-President (1996-7) President (1997)
2003-2005	Institutional Research Funds Subcommittee University Research Committee, Medical University of South Carolina	Member/ Reviewer
2004	Student Research Day Medical University of South Carolina	Judge
2005	Summer Health Professional Research Program Medical University of South Carolina	Application Reviewer
2006-2012	Women's Faculty Association UTHSCSA	Member (2006-present) President (2006-7) Recruiting Chair (2007-8)
2006-2010	Conflict of Interest Committee, UTHSCSA	Medical School Representative
2006-2012	Advisory Committee for Biomedical Research Barshop Institute, UTHSCSA	Medical School Representative
2007	UTHSCSA Leadership, Education, and Development (LEAD) Institute - 1 of 24 UTHSCSA leaders selected for the 2 nd annual 9 month class on developing leadership skills	Fellow
2007-2012	Cardiovascular Function Core Barshop Institute for Longevity and Aging Studies, Nathan Shock Aging Center of Excellence	Director
2007-2008	University Research Core Facility Committee, UTHSCSA	Member
2009-2012	Mass Spectrometry Core Advisory Committee, UTHSCSA	Member
2009-2010	Council for Education Innovation and Research Research Education, Training, and Career Development Key Function Institute for Integration of Medicine and Science The purpose of this council is to share and develop processes for the creation and evaluation of research education programs throughout UTHSCSA.	Board Member
2009-2010	Academic Environment Subcommittee LCME Self-Study, SOM, UTHSCSA	Chair
2011-2012	Glenn Foundation Student Fellowship Selection Committee Barshop Institute, Graduate School, UTHSCSA	Member
2013-present	Research Advisory Committee University of Mississippi Medical Center	Member

2013-present	Group on Women in Medicine and Science (GWIMs), UMMC	Member
2013	Research Informatics Committee University of Mississippi Medical Center	Member
2014-present	Grant Review Committee Cardiovascular Renal Research Center, University of Mississippi Medical Center	Member
2014-present	Centers and Institutes Committee University of Mississippi Medical Center 2016- subcommittee to update review process and forms	Member
2014-2015	Institute Model Strategic Plan Subcommittee University of Mississippi Medical Center	Member
2015	Jackson Heart Study Task Force University of Mississippi Medical Center	Member
2015-present	Central Data Warehouse Research Qlik Cohort Implementation Committee University of Mississippi Medical Center	Member
2016-8	Discovery Awards Review Panel University of Mississippi Medical Center	Member
2017-8	Promotion and Tenure Committee Procedures & Process Subcommittee University of Mississippi Medical Center	Member Chair
<u>Inter-institutional</u>		
Year(s)	Committee	Member/ Officer
2004-2005	Institutional Animal Care and Use Committee Ralph H. Johnson VA Medical Center, Charleston, SC	Member
2007-2012	Joint Program in Biomedical Engineering Committee on Graduate Studies, UTSA/ UTHSCSA	Member
2007-2008	Faculty Search Committee, Department of Biomedical Engineering, UTSA	Member
2014	Rural Interdisciplinary Case Experience (RICE) Bowl , UMMC	Judge
2015-2016	Animal Care and Use Committee University of Mississippi Medical Center and G.V. (Sonny) Montgomery VA Medical Center	Alternate Voting Member
2017	VA Brain-Heart Multisite Consortium Meeting; July 29-30, Columbia, SC	Working group member
<u>National</u>		
Year(s)	Committee	Member/ Officer
2015	NIH/NHLBI Workshop Working Group <i>Refining Current Scientific Priorities and Identifying New Scientific Gaps in HIV-related Heart, Lung, and Blood Research</i> , Bethesda, MD (December 2015)	Member
2016	South Carolina IDeA Network of Biomedical Research Excellence (INBRE)	External Advisory Board
2018	Basic and Translational Science in Heart Failure (BTSHF) T32 training grant, University of Alabama at Birmingham, Cardiology Division	Chair, External Advisory Board
<u>International</u>		
Year(s)	Committee	Member/ Officer
2015	European Society of Cardiology, Heart Failure Association Workshop Working Group <i>Fibrosis</i> , Brussels, Belgium (March 2015)	Member