CURRICULUM VITAE Ganesh V. Halade, Ph.D.

Date of Preparation: March 2023

I. GENERAL INFORMATION

A. Personal Data:

Work Address:	University of South Florida, Tampa, FL MDD-614
	560 Channelside Dr, Tampa, Florida 33602 phone: 813-396-0104 (office)
Email: Citizenship	ghalade@usf.edu US Citizen (Naturalized)

B. Education:

YEAR		MAJOR	INSTITUION/LOCATION
1994-1998	B.S.	Pharmaceutical	North Maharashtra University, India
		Sciences	
1998-2000	M.S.	Pharmacology	Birla Institute of Technology, India
2001-2007	Ph.D.	Pharmacology	Institute of Chemical Technology, University of Mumbai, India

C. Postgraduate Training:

Postdoctoral Fellowship	University of Texas Health Science Center at San Antonio San Antonio, TX	
Fellowship Advisor: Gabriel Fernandes, Ph.D. Mechanistic aspects of fish oil as a dietary supplement in lupus, obesity and bone remodeling.		
Postdoctoral Fellowship	University of Texas Health Science Center at San Antonio San Antonio, TX	
	Postdoctoral Fellowship Fellowship Advisor: Gabriel Fernanc <i>Mechanistic aspects of fish oil as</i> Postdoctoral Fellowship	

Fellowship Advisor: Merry Lindsey, Ph.D. (K99 Training Award Mentor) DHA Mechanisms in Obesity-mediated Cardiac Remodeling Post-Myocardial Infarction

D. Academic Appointments:

2020-present	Associate Professor (Tenured), Department of Medicine, Division of Cardiovascular Sciences,
	University of South Florida (USF), Tampa, FL.
2018-present	Associate Professor (Tenured), Department of Medicine, Division of Cardiovascular Disease, UAB
2013-present	Assistant Professor (Tenure earning), Department of Medicine, Division of Cardiovascular Disease,
	The University of Alabama at Birmingham (UAB) – Promotion and Tenure approved in Aug 2018.
2013-present	Associate Scientist, Comprehensive CardioVascular Center (CCVC), UAB
2013-present	Associate Scientist, Nutrition Obesity Research Center (NORC), UAB
2014-present	Associate Scientist, Center for Exercise Medicine, UAB

E. Other Employment:

2000-2001	Chemist - Regulatory Affairs, USV Limited, B.S.D. Marg, Mumbai, India
2001-2001	Officer- International Regulatory Affairs, Cadila Healthcare Limited, Ahemdabad, India
2001-2005	Research Fellow, Institute of Chemical Technology, Mumbai University, India
2005-2006	Assistant Manager – Pre-clinical Department, Bharat Serums and Vaccines Limited, India

F. Certification, Licensure, and Training:

Registered pharmacist, Maharashtra State Pharmacy Council, India
Dietary Supplement Research Practicum, Office of Dietary Supplements, NIH, Bethesda, MD
Manuscript Writing and Reviewing Course, American Physiological Society, Orlando, CA
NIH Regional Seminar on Program Funding and Grants Administration, Indianapolis, IN
20th Annual Summer Training Course in Experimental Aging Research, The Buck Institute for Research on Aging, Novato, CA

Page 2 of 19

- 2012 An organ systems approach to experimental targeting of the Metabolic Syndrome, Vanderbilt University Medical Center, Nashville, TN
- 2016 NIH common fund metabolomics program 2016 Annual Meeting
- 2019 Research Career Enhancement Award sponsored by American Physiological Society

G. Honors and Awards:

1998	Second prize – 'Know AIDS for No AIDS' - Health, Environment and Pollution conference, India.
1998-1999	Graduate Aptitude Test in Engineering, India (86.50 percentile score)
2001	Qualified DL-101 World Intellectual Property Organization (WIPO) 'Introduction to 'Intellectual
	Property Rights (IPR)' - 'A' grade
2002-2003	Recipient of Sir Ratan Tata Scholarship, Mumbai, India
2003-2003	Recipient of J.R.D. Tata Scholarship, Mumbai, India
2002-2003	Qualified a 'Legal Aspects of Traditional Knowledge and Biodiversity' WIPO in Association
	with University of South Africa
2008	JOGUE Junior Scientist Award, in Nutrition - Association of Scientists of Indian Origin
	in America (ASIOA), Inc. San Diego, USA.
2010	Travel award for "Dietary Supplement Research Practicum" - NIH - Office of Dietary Supplements,
	Bethesda, Maryland, USA
2010	Barbara H. Bowman Award as an outstanding postdoctoral fellow at UTHSCSA, TX (only one fellow
	receives this award annually)
2012	Featured Young Investigator: San Antonio Cardiovascular proteomics center winter newsletter, TX
2012	Sudhir Gupta Young Investigator Award from Association of Scientists of Indian Origin in America
	(ASIOA), Inc. San Diego, CA
2014	Travel Honorarium -APS-Cardiovascular Section Experimental Biology (for presenting featured topic)
2014-2020	Editorial Board American Journal of Physiology – Heart and Circulatory
2014-present	Frontiers in Cardiovascular Medicine, Journal of Cardiology and Therapy, Journal of Cardiology and
	Clinical Research, and Journal of Biological Research and Development
2015	Outstanding Reviewer - Journal of Molecular and Cellular Cardiology
2016	American Heart Association Young Investigator Award Finalist
2016	Best paper award American Journal of Physiology – Heart and Circulatory for the
	paper entitled "Obesity superimposed on aging magnifies inflammation and delays the resolving
	response after myocardial infarction" presented at Experimental Biology meeting at Chicago 2017
2017	Pittman Scholar Award, at the University of Alabama at Birmingham, AL
2018	Selected for Featured Discovery, School of Medicine, The University of Alabama at Birmingham.
2018-2019	American Physiological Society – Research Career Enhancement Award to gain lipidomics training
	with Dr. Makoto Arita, RIKEN center, Japan
2018	<u>Best paper award</u> from Science Unbound foundation, for paper published in 2017, "Interaction of
	12/15 lipoxygenase with fatty acids alters the leukocyte kinetics leading to improved post-myocardial
0040	infarction healing. American Journal of Physiology – Heart and Circulatory. 313(1):H89-H102.
2019	Department of Medicine Innovation in Research Award, UAB
2019	Elcosanoid Research Foundation - Young Investigator Award Finalist, at the 16 th International
0000	Conterence on Bloactive Lipids in Cancer, Inflammation and Related Diseases, St Petersburg, FL
2020	Article Impact Award for manuscript entitled Doxorubicin triggers spienic contraction and irreversible
	dysregulation of COA and LOA that alters the initiammation-resolution program in the myocardium
2021-present	(Allineuric Score, 151) Consulting aditor American, Journal of Physiology – Heart and Circulatory
2021-piesent	Consulting cutor American Journal of Physiology – Healt and Orculatory

Awards for research excellence by fellow students/trainee supervised:

<u>Vasundhara Kain</u>: RvD1 Activates Resolution of Inflammation Following Myocardial Infarction Leading To Improved Ventricular Function. <u>Travel Award for the Experimental Biology</u>, 2015 from American Society of Investigative Pathology, Boston, MA, 2015. UAB <u>Postdoc Research Day winner</u> (Third place), 2015, Resolution Agonist 15-epi-Lipoxin A₄ Directs FPR2 to Expedite Healing Phase Post-Myocardial Infarction. <u>Travel Award for the Experimental Biology</u>, 2016 from <u>American Society of Investigative Pathology</u>, San Diego, CA, 2016. ASIP 2016 <u>Hans-Monga Award for Excellence in Cardiovascular Research</u>, <u>Young Investigator Award</u> from Society for Experimental Biology, 2016. UAB Travel award 2017, Experimental Biology meeting at Chicago, IL. Selected as a <u>finalist</u> for Cardiovascular Section Outstanding Trainee Award, 2018 Experimental Biology meeting at San Diego, CA. <u>Second Place</u>: 8th Annual Symposium Presented by UAB Comprehensive Cardiovascular Center on 20th September at the 8th Annual Symposium – New Horizons in Cardiovascular Disease: A Focus on Precise and

Personalized Medicine, Birmingham, AL. Eicosanoid Research Foundation Travel Award, at the 16th International Conference on Bioactive Lipids in Cancer, Inflammation and Related Diseases, St Petersburg, FL, USA, 2019. Santosh Nigam Outstanding Young Scientist Award competition Finalist, at the 16th International Conference on Bioactive Lipids in Cancer, Inflammation and Related Diseases, St Petersburg, FL, USA, 2019.

Amy Schmitt: Koopman Medical Research Excellence Scholar Award, 2017 (MD Trainee)

<u>MeMe Collier</u>: STRIDE Undergraduate Summer Research Fellowship, American Physiological Society (Pre-med trainee), Travel award to attend Experimental Biology meeting at San Diego, IL 2018.

<u>Gabriell N. Cunningham</u>: Most Promising Scientist, Center for Community Outreach Development (CORD), AL, 2018. <u>Nirav Patel, MD</u>: (fellow, Cardiovascular Disease) collaborative work selected for Genomic and Precision Medicine Young

Investigator Award Finalist, American Heart Association, Scientific meeting, Chicago, IL, 2018Halade LabLab team Third place, Green Labs Recycling Competition organized by UAB sustainability recyclingCoordinator Feb 2019.

H. Grant Review Committees and Study Section

2014-2016	Member, American Heart Association, Cardiac Biology / Regulation - Basic Science 6 Study Section
2016-present	Member, American Heart Association, Cardiac Biology / Regulation - Basic Science 2 Study Section
2014	Ad hoc, Albert Einstein College of Medicine of Yeshiva University - Pilot and Feasibility Section
2015	Ad hoc, review member - The Children's Hospital Research Institute of Manitoba (CHRIM), Canada.
2016	Ad hoc reviewer - PRESTIGE post-doc fellowship Programme, France
2017-2018	Reviewer, GRD709 Mock study section. The University of Alabama at Birmingham
2016-2017	Ad hoc reviewer - National Science Center, Poland
2016-2019	Member, American Physiological Society, Cardiovascular Section Awards Committee
2016-present	Department of Medicine – Research Development Group. The University of Alabama at Birmingham
2016-2017	NIH study section (ZHL1) Cardiovascular and Pulmonary Research on E-Cigarettes (R01)-Ad hoc
2017-2018	Study section member - Tobacco-Related Disease Research Program (TRDRP) Cardiovascular and
2011 2010	Cerebrovascular Diseases Review Panel (review 7-8 proposal each cycle)
2018	Study section member AHA Transformative Project Award – Basic Cardiac Sciences
2018	NIH Special Emphasis Panel (7HI 1-CSR- N (S1)) Basic Research on E-Cigarette Physiology and
2010	Pathohysiology (R01)-Ad hoc
2018	Member, Study Section, American Heart Association, Basic Cardiac Sciences Committee Cardiac
2010	Biology/Regulation - Basic Science 2, Career Development Award
2018	Grant Reviewer, Swiss National Science Foundation, Switzerland
2018-2019	Committee member-Transformational Project Award (TPA) Cardiac Basic Sciences, American Heart
2010 2010	Association.
2019	Ad hoc, review member, Medical Research Council, United Kingdom
2019-present	APS Committee member and reviewer for applicants of Fellow of American Physiological Society in
•	Cardiovascular Section and letter of intent of trainee for APS Postdoctoral Fellowship Program
2019	Croatian Science Foundation grant reviewer, Croatia
2019	Ad hoc reviewer. Swiss National Science Foundation. Switzerland
2019	External Reviewer, UNMC Center for Heart and Vascular Research Pilot Grant Program (in collaboration
	with the Great Plains IDeA-CTR)
2020	Independent referees Dutch Research Council, Nederlandse Organisatie voor Wetenschappelijk
	(Netherland)
2021	External reviewer, Austrian Science Fund, Austria
2021	Faculty grant reviewer, Forschungskommission, Medical Faculty, Heinrich Heine-University, Düsseldorf,
	Germany
2021	Ad hoc grant reviewer, French National Research Agency, France
2021	Faculty evaluation reviewer, University of Nebraska Medical Center, Omaha, NE
2021	Ad hoc grant reviewer, California North State University, College of Pharmacy, CA.
2021	Reviewer, American Heart Association, Career Development Award
2021	NIH, NHLBI, MPPA - Integrative Myocardial Physiology/Pathophysiology A Study Section, Cardiovascular
	and Respiratory Sciences Integrated Review Group
2021	Ad hoc grant reviewer, Icelandic Research Fund, Denmark
2022	Ad hoc trainee grant reviewer, Queen Mary University of London
2022-2026	NIH, NHLBI, Regular panel member, Myocardial Physiology/Pathophysiology A – MPPA
2022-present	USF Research Council, review internal research awards and recommend various awards for excellence

II. TEACHING

A. Instructional Development:

<u>Year</u>	Course title/lecture topic	<u>Role</u>
Student eval	luation score: Avg ± SD; scale: 1=best; 5=worst	
2012	Responsible Conduct of Research	Instructor
	Is it training or responsibility? Initiated this training module at San Antonio	Cardiovascular Proteomics
	Center and collaborators at University of Texas at San Antonio, TX (Numb	er of attendee: 23 on
	$02/03/2012$, the anonymous survey ranked $1.3\pm$ out of 5.0.)	
2015	Lab notebook for Research Laboratory	Instructor
	Pathobiology & Molecular Medicine (PBMM) at UAB first-year students (nu	Imber of attendee 10)
2016	GBS749 – Mitochondrial function in inflammation/immunity	Lecturer
	(Number of attendee 8-10)	
2016	International regulatory affairs - Preclinical and Clinical Research	Lecturer
	Invited visiting faculty at the University of Bordeaux, France	
	(Number of attendee 29; anonymous survey ranked 1.7±0.4 out of 5.0.)	
2016	Mass spectrometry application in drug discovery	Lecturer
	Invited visiting faculty at the University of Bordeaux, France	
	(Number of attendee 24; anonymous survey ranked 1.4±0.3 out of 5.0.)	
2016	Paradigm shift in drug discovery – Fatty Acids-derived Drug Discovery	Lecturer
	Invited visiting faculty at the University of Bordeaux, France	
	(Number of attendee 23; anonymous survey ranked 1.3±0.3 out of 5.0.)	
2017	GBS751 - Cellular composition of the heart and Hemodynamics	Lecturer
	(Number of attendee 10; anonymous survey ranked 1.4 ± 0.4 out of 5.0.)	_
2017	GBS-751 - Cardiac Cycle and age-related pathology in cardiac cycle	Lecturer
	(Number of attendee 14; anonymous survey ranked 1.5 ± 0.2 out of 5.0.)	
2018	Quality Control of Drugs: ICH/FDA/SFSTP (1)	Lecturer
	(Number of attendee 30; anonymous survey ranked 1.8 ± 0.5 out of 5.0.)	
2018	Quality Control of Drugs: ICH/FDA/SFSTP (2)	Lecturer
0010	(Number of attendee 32; anonymous survey ranked 1.7 ± 0.4 out of 5.0.)	
2018	GBS/49 – Mitochondrial function in inflammation/immunity	Lecturer
0000	(Number of attendee 8-10)	
2022	Regulatory Analis in Pharma industry with Example of Fatty Acids	Lasturar
	(Number of ettendee 20.25)	Lecturer
2020.24	(Number of allendee 20-23) Trainee Desearch in Dragross (TDID: Initiated web based trainee presents	tion and interaction
2020-21	namee Research-III Flogress (TRIF, Initialeu web-baseu trainee presenta	α_{1001} and interaction α_{100} and α_{100}
2021-22	Trainee Pesearch In Progress (All trainee presentations lined up for 2021	
2021-22	GMS6604 001E21 04153 Human Structure and Eupetion - Cellular Pegula	tion & Human Disease
2021-22	(Number of attendee 20 in-person and 10-15 virtual)	alon & Human Disease
2021-22	GMS 6410 - Cardiovascular regulation - Regulation of Cardiovascular Sve	tem During Heart Failure
	(Number of attendee 3 cardiovascular theme graduate trainee)	

RESEARCH

A. Bibliography:

1. Papers published or in press (*Corresponding author):

- 1. **Halade GV***, Juvekar AR. Effect of *Spirulina Platensis* pretreatment on isoproterenol induced hyperlipidemia in rats. *Pharmacologyonline*. (2):243-251, 2006.
- 2. Juvekar AR and Halade GV. Hypoglycemic activity of *Cassia auriculata* in neonatal streptozotocin-induced non-insulin dependent diabetes mellitus in rats. *J Nat Remed.* 6; (1):14-18, 2006.
- 3. Deshmane DN, Gadgoli C, Halade GV. Anticonvulsant effects of *O. majorana* L., *Pharmacologyonline*. (1): 64-78, 2007.
- 4. Rahman MM, **Halade GV**, El Jamali A, Fernandes G. Conjugated linoleic acid (CLA) prevents age associated skeletal muscle loss. *Biochem Biophys Res Commun.* 12; 383 (4): 513-8, 2009.
- 5. **Halade GV**, Rahman MM, Fernandes G. Effect of CLA isomers and their mixture on aging C57BI/6J mice. *Euro J Nutr.* 48; (7):409-18, 2009.

- Rahman MM, Halade GV, Bhattacharya A, Fernandes G. The fat-1 transgene in mice increases antioxidant potential, reduces pro-inflammatory cytokine levels, and enhances PPAR-γ and SIRTI-1 expression on a caloric restricted diet. Oxid Med Cell Longev. 2:5,307-316, 2009.
- Halade GV, Rahman MM, Fernandes G. Differential effects of CLA isomers in insulin resistant female C57BI/6J mice. J. Nutr Biochem. 21(4):332-7, 2010. <u>This article was included in the top 25 hottest articles from April-June 2009</u> <u>selected by sciencedirect.</u>
- Halade GV, Rahman MM, Williams PJ, Fernandes G. High fat diet-induced animal model of age-associated obesity and osteoporosis. J. Nutr Biochem. 21: (12):1162-9, 2010. <u>This article was included in the top 25 hottest articles</u> <u>from October-December 2010.</u>
- Halade GV, Rahman MM, Bhattacharya A, Barnes J, Chandrasekar B, Fernandes G. Docosahexaenoic acid-enriched fish oil attenuates kidney disease and prolongs median and maximal life span of autoimmune lupus-prone mice. J Immunol. 184(9): 5280-6, 2010.
- 10. Halade GV, Rahman MM, Williams PJ, Fernandes G. Combination of conjugated linoleic acid and fish oil prevents age-associated bone marrow adiposity in C57Bl/6J mice. *J. Nutr Biochem.* 22(5): 459-69, 2011.
- 11. Puranik AS, **Halade GV**, Sandeep Kumar, Mogre R, Apte K, Vaidya A, Patwardha B. *Cassia auriculata*: aspects of safety pharmacology and drug interaction. *Evid Based Complement and Alternat Med.* 2011. (in press)
- 12. Halade GV*, Jamali AK, Williams PJ, Fajardo RJ, Fernandes G. Obesity-mediated inflammatory microenvironment stimulates osteoclastogenesis and bone loss in mice. *Exp Geronto.* 46:1: 43-52, 2011. <u>This article was included in the top 25 hottest articles from October-December 2010.</u>
- 13. Rahman MM, **Halade GV**, Fernandes G. t10c12-CLA maintains higher bone mineral density during aging by modulating osteoclastogenesis and bone marrow adiposity. *J. Cell Physiol.* 226(9: 2406-14, 2011.
- 14. Halade GV*, Williams PJ, Lindsey ML, Fernandes G. Fish oil decreases inflammation and reduces cardiac remodeling in rosiglitazone treated aging mice. *Pharmacol Res.* 63: 4: 300-7, 2011.
- 15. Veigas JM, Williams PJ, **Halade GV**, Rahman MM, Yoneda T, Fernandes G. Fish oil concentrate delays sensitivity to thermal nociception in mice. *Pharmacol Res.* 63(5): 377-82, 2011.
- 16. Zamilpa R, Ibarra J, de Castro Bras L, Ramirez TA, Nguyen N, Halade GV, Zhang J, Dai Q, Dayah T, Chiao YA, Ahuja SS, D'Armiento, J, Jin YF, Lindsey ML. Transgenic overexpression of matrix metalloproteinase-9 in macrophages attenuates the inflammatory response and improves left ventricular function post-myocardial infarction. *J Mol Cell Card*. 53: 599–608, 2012.
- 17. Wang Y, Jin YF, Ma Y, Halade GV, Lindsey ML. Mathematical modeling of macrophage activation in left ventricular remodeling post-myocardial infarction. *BMC Genomics*. 13(Suppl 6):S21, 2012.
- 18. Banu J, Varela E, Guerra JM, Halade GV, Williams PJ, Bahadur AN, Hanaoka K, Fernandes G. Dietary coral calcium and zeolite protects bone in a mouse model for postmenopausal bone loss. *Nutr Res.* 32(12):965-75, 2012.
- 19. Ma Y, **Halade GV**, Zhang J, Ramirez TA, Levin D, Voorhees A, Jin Yu-Fang, Manicone AM, Han HC, Lindsey ML. Matrix metalloproteinase-28 deletion exacerbates cardiac dysfunction and rupture following myocardial infarction in mice. *Circ Res.* 112: 675-688, 2013.
- 20. de Castro Brás LE, Ramirez TA, DeLeon KY, Chiao YA, Ma Y, Dai Q, **Halade GV**, Hakala K, Weintraub ST, Lindsey, ML. Texas 3-step decellularization protocol: Looking at the cardiac extracellular matrix. *J Proteo Res.* 86: 43-52, 2013.
- 21. Halade GV*, Williams PJ, Veigas, JM, Barnes JL, Fernandes G. Concentrated fish oil (Lovaza®) extends lifespan and attenuates kidney disease in lupus–prone short-lived (NZBXNZW)F1 mice. *Exp Bio Med.* 238: 610 622, 2013.
- 22. Heaberlin JR, Ma Y, Zhang J, Ahuja SS, Lindsey ML, **Halade GV***. Obese and diabetic *KKAy* mice show increased mortality but reduced ventricular dysfunction following myocardial infarction. *Cardiovasc Pathol.* 22:481–487, 2013.
- 23. Halade GV*, Ma Y, Ramirez TA, Zhang J, Dai Q, Hensler J, Lopez EF, Ghasemi O, Jin YF, Lindsey ML. Reduced BDNF attenuates inflammation and angiogenesis to improve survival and cardiac function following myocardial infarction in mice. *Am J Physiol-Heart C*. 305:12, H1830-42, 2013.
- 24. de Castro Brás LE, Cates CA, DeLeon-Pennell KY, Ma Y, Iyer RP, **Halade GV**, Yabluchanskiy A, Fields GB, Weintraub ST, Lindsey, ML. Citrate Synthase is a Novel In Vivo Matrix Metalloproteinase-9 Substrate that Regulates Mitochondrial Function in the Post-Myocardial Infarction Left Ventricle. *Antioxid. Redox Signal.* 21(14):1974-85, 2014.
- Tian Y, Koganti T, Yao Z, Cannon P, Shah P, Pietrovito L, Modesti A, Aiyetan P, DeLeon-Pennell K, Ma Y, Halade GV, Hicks C, Zhang H, and Lindsey ML. Cardiac extracellular proteome profiling and membrane topology analysis using glycoproteomics *Proteomics Clin Appl.* 8(7-8):595-602, 2014.
- 26. Brown AO, Mann B, Gao G, Hankins J, Humann J, Giardina J, Faverio P, Restrepo MI, **Halade GV**, Mortensen EM, Lindsey ML, Hanes M, Happel KI, Nelson S, Esteban A, Bagby GJ, Le Saux CJ, Tuomanen EI, Orihuela CJ. Streptococcus pneumoniae translocates into the myocardium and forms unique microlesions that disrupt cardiac function. *PLOS Pathogens*. 10: 9 e1004383, 2014.
- 27. Shivshankar P, **Halade GV**, Calhoun C, Escobar GP, Mehr AJ, Jimenez F, Martinez C, Bhatnagar H, Mjaatvedt CH, Lindsey ML, Le Saux CJ. Caveolin-1 deletion exacerbates cardiac interstitial fibrosis by promoting M2 macrophage activation in mice after myocardial infarction. *J Mol Cell Card*. 76C:84-93, 2014.
- 28. Allison DB, Antoine LH, Ballinger SW, Bamman MM, Biga P, Victor M. Darley Usmar VM, Fisher G, Gohlke JM, Halade GV, Hartman JL, Hunter GR, Messina JL, Nagy TR, Plaisance EP, Roth KA, Sandel MW, Schwartz TS, Smith

DL, Sweatt D, Tollefsbol TO, Watts SA, Yang Y, Zhang J, Austad SN. Powell ML. Aging and energetics' 'Top 40' future research opportunities. 2010-2013. F1000Research, 3:219 (doi: 10.12688/f1000research.5212.1), 2014.

- 29. Lopez EF, Kabarowski JH, Ingle KA, Kain V, Barnes S, Crossman DK, Lindsey ML, Halade GV*, Obesity superimposed on aging magnifies inflammation and delays the resolving response following myocardial infarction. Am J Physiol-Heart C. 308(4):H269-80, 2015. (Selected for Best paper award and APSselect March 2015 for distinction in scholarship by the American Journal of Physiology) APSselect is a Society-wide mechanism to highlight, promote, and rapidly disseminate outstanding original research published by the APS each month. APS publishes some 210 new research papers each month, and a small subset of these is then ultimately chosen for inclusion in APSselect.
- 30. Kain V, Ingle KA, Colas RA, Dalli J, Prabhu SD, Serhan CN, Joshi M, **Halade GV*** Resolvin D1 activates the inflammation resolving response at splenic and ventricular site following myocardial infarction leading to improved ventricular function. *J Mol Cell Card.* 84:24-35, 2015.
- Yabluchanskiy A, Ma Y, DeLeon-Pennell KY, Altara R, Halade GV, Voorhees AP, Nguyen NT, Jin Y-F, Winniford MD, Hall ME, Han H-C, Lindsey ML. Myocardial Infarction Superimposed on Aging: MMP-9 Deletion Promotes M2 Macrophage Polarization. Journal of Gerontology: Biological Sciences. 71(4):475-83, 2016.
- 32. Voorhees A, DeLeon-Pennell KY, Ma Y, **Halade GV**, Yabluchanskiy A, Iyer P, Flynn E, Cates C, Lindsey ML, Han H-C, Building a Better Infarct: Modulation of Collagen Cross-linking to Increase Infarct Stiffness and Reduce Left Ventricular Dilation post-Myocardial Infarction. *J Mol Cell Cardiol.* 85:229-39, 2015. PMID: 26080361
- Ingle KA, Kain V, Goel M, Prabhu SD, Young ME, Halade GV*. Cardiomyocyte specific Bmal1 deletion in mice triggers diastolic dysfunction, extracellular matrix response and impaired resolution of inflammation. Am J Physiol Heart Circ Physiol. 1;309(11):H1827-36, 2015.
- 34. DeLeon-Pennell KY, Tian Y, Zhang B, Cates CA, Iyer RP, Cannon P, Shah P, Aiyetan P, **Halade GV**, Ma Y, Flynn E, Zhang Z, Jin YF, Zhang H, Lindsey ML. CD36 is a matrix metalloproteinase-9 substrate that stimulates neutrophil apoptosis and removal during cardiac remodeling. *Circulation: Cardiovascular Genetics.* 9, 14-25, 2016.
- 35. Kumar RR, Narasimhan M, Shanmugam G, Hong J, Devarajan A, Palaniappan S, Zhang J, **Halade GV**, Darley-Usmar VM, Hoidal JR, Rajasekaran NS. Abrogation of Nrf2 impairs antioxidant signaling and promotes atrial hypertrophy in response to high-intensity exercise stress. *Journal of Translational medicine*, 5;14(1):86, 2016.
- 36. Halade GV*, Kain V, Black LM, Prabhu SD, Ingle KA. Aging dysregulates D- and E-Series resolvins to modulate cardiosplenic and cardiorenal network following myocardial infarction. Aging (Albany NY), 8(11):2611-2634, 2016. (Selected for cover page image and in TOP 45 aging publications)
- Halade GV*, Kain V, Ingle KA, Prabhu SD. Interaction of 12/15 lipoxygenase with fatty acids alters the leukocyte kinetics leading to improved post-myocardial infarction healing. *Am J Physiol Heart Circ Physiol.* 313(1):H89-H102, 2017. (Received <u>Best paper award</u> from Science Unbound foundation in 2018 for this paper).
- Kain V, Liu F, Kozlovskaya V, Ingle KA, Bolisetty S, Agarwal A, Khedkar S, Prabhu SD, Kharlampieva E, and Halade GV*. Resolution agonist 15-epi-Lipoxin A4 programs early activation of resolving phase in post-myocardial infarction healing. *Sci. Rep* 30;7(1):9999, 2017.
- 39. Wende A, Kim J, Holland W, Wayment B, O'Neill B, Tuinei J, Brahma M, Pepin M, McCrory M, Luptak I, **Halade GV**, Litwin S, and Abel ED. Glucose transporter 4 (GLUT4) deficient hearts develop maladaptive hypertrophy in response to physiologic or pathologic stresses. *Am J Physiol Heart Circ Physiol.* 313(6):H1098-H1108, 2017.
- 40. Halade GV*, Norris PC, Kain V, Serhan CN, Ingle KA. Splenic Leukocytes Defines the Resolution of Inflammation in Heart Failure. *Science Signaling*, 6;11(520), 2018.
- 41. **Halade GV***, Kain V, Ingle KA. Heart Functional and Structural Compendium of Cardiosplenic and Cardiorenal Networks in Acute and Chronic Heart Failure Pathology (*Am J Physiol Heart Circ Physiol.* 314(2):H255-H267, 2018.
- 42. Kain V, Ingle KA, Kachman M, Baum H, Shanmugam G, Rajasekaran NS, Young ME, Halade GV*. Excess Omega-6 Fatty Acids Influx in Aging Drives Metabolic Dysregulation, Electrocardiographic Alterations and Low-grade Chronic Inflammation. Am J Physiol Heart Circ Physiol. 314(2):H160-H169, 2018.
- 43. Halade GV*, Dorbane A, Ingle KA, Kain V, Schmitter JM, Rhourri-Frih B. Comprehensive Targeted and Non-targeted Lipidomics Analysis in Failing and Non-failing Heart. *Anal. Bioanal. Chem.*, 410(7):1965-1976, 2018.
- 44. **Halade GV***, Kain V, Serhan CN. Immune Responsive Resolvin D1 Programs Myocardial Infarction-induced Cardiorenal Syndrome in Heart Failure, *FASEB J.*, 32(7):3717-3729, 2018.
- DeLeon-Pennell KY, Iyer RP, Ma Y, Yabluchanskiy A, Zamilpa R, Chiao YA, Cannon P, Cates C, Flynn ER, Halade GV, de Castro Bras LE, Lindsey ML. The Mouse Heart Attack Research Tool (mHART) 1.0 Database. Am J Physiol Heart Circ Physiol., 1;315(3):H522-H53, 2018.
- 46. Kain V, Ingle KA, Kabarowski JH, Barnes S, Limdi LA, Prabhu SD, **Halade GV*.** Genetic Deletion of 12/15 Lipoxygenase Promotes Effective Resolution of Inflammation Following Myocardial Infarction. *J Mol Cell Cardiol.*, 118:70-80, 2018.
- 47. Kain V, and **Halade GV*.** Immune responsive Resolvin D1 programs peritoneal macrophage and cardiac fibroblat phenotypes in diversified metabolic microenvironment. *J Cell Physiol.* 234(4):3910-3920, 2018.
- 48. Jadapalli JK, Wright GW, Kain V, Sherwani AM, Sonkar R, Yusuf N, **Halade GV***, Doxorubicin triggers splenic contraction and irreversible dysregulation of COX and LOX to facilitate impaired inflammation-resolution program in the myocardium, *Am J Physiol Heart Circ Physiol.*, 315(5):H1091-H1100, 2018.

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- 56. Kriska Y, **Halade GV**, and Campbell WB. The Role of Macrophage 12/15-Lipoxygenase in the Development of Angiotensin II Hypertension in Mice. Bioactive Lipids in Cancer, Inflammation and Related Diseases, St. Petersburg, FL, Oct 20-23, 2019.
- 57. Tourki B, Kain V, Norris PC, Jadapalli JK, Pullen AB, Arora P, Leroy X, Serhan CN, **Halade GV***. Aging Drives Cardiometabolic and Cardiorenal Defects in Resolution Sensor Deficient Mice with Defective Inflammation-Resolution in Heart Failure. Bioactive Lipids in Cancer, Inflammation and Related Diseases, St. Petersburg, FL, Oct 20-23, 2019.

- 58. Kain V, Travis R, Jadapalli JK, Pullen AB, **Halade GV*.** Maresin 1 facilitates cardiac repair by promoting reparative macrophages and limits cardiorenal inflammation in acute heart failure. Bioactive Lipids in Cancer, Inflammation and Related Diseases, St. Petersburg, FL, Oct 20-23, 2019.
- 59. Masjoan Juncos JX, Shakil S, Bradley WE, Zafar I, Mariappan N, Louch WE, Dell'Italia LJ, Halade GV, Ahmad A, Ahmad S.1Cardiac specific SERCA knock out mice replicate adverse cardiac effects of bromine and demonstrate enhanced myocardial injury, 59th Annual meeting Society of Toxicology, Anaheim, CA, Mar 15–19, 2020.
- 60. Yang Y, Kozlovskaya VA, Ingle KA, **Halade GV**, Kharlampieva EP. Biodegradable Temperature Responsive Polymersomes for Triggered Anticancer Drug Release, National American Chemical Society (ACS) Meeting in Philadelphia, PA, Mar 22-26, 2020.
- Grilo GA, Serhan CN, Nadler JL, Kain V, Halade GV*. Macrophage specific lipoxygenase deletion amplify cardiac repair activating Tregs in chronic heart failure. American Heart Association scientific meeting, Boston, MA, 13-15 Nov, 2021
- 62. **Halade GV***, Grilo GA, Tourki B, Kain, V. Deficiency of Arachidonate 5-lipoxygenase Intensifies Sepsis-induced Cardiac Dysfunction in Aging, American Heart Association scientific meeting, Boston, MA, 13-15 Nov, 2021
- 63. Kain V and **Halade GV***. Arachidonate 5 Lipoxygenase Deficiency Drives Age-related Obesity, Macrophage Dysfunction in Cardiac Repair, and Omnipresence of Inflammation. American Heart Association scientific meeting, Boston, MA, 13-15 Nov, 2021
- 64. Halade GV*, Mat Y, Gowda SB, Jain S, Hui SP, Yadav H, Kain V. Sleep Deprivation in Obesogenic Setting Alters Lipidome and Microbiome Toward Suboptimal Inflammation in Acute Heart Failure, Basic Cardiovascular Sciences Scientific Sessions, American Heart Association meeting, Chicago, IL, 25-28 Jul, 2022.
- 65. Halade GV*, Mat Y, Kain V. Arachidonate 5 Lipoxygenase Serve as a Connector of Inflammation and Resolution in Cardiac Repair in Young and Aging Mice in Heart Failure. Bioactive Lipids meeting in Cancer, Inflammation and Related Diseases, New Orleans, LA, Oct 3 Nov 2, 2022. (Young Investigator Award Finalist).
- 66. Kain V, Tourki B, Mat Y, Grilo GA, **Halade GV*.** Insufficiency of Arachidonate 5-Lipoxygenase Aggravates Sepsis-Induced Cardiac Dysfunction in Aging. Bioactive Lipids meeting in Cancer, Inflammation and Related Diseases, New Orleans, LA, Oct 3 - Nov 2, 2022.

5. Other:

Invited Lectures and Presentations:

- 1. Bone remodeling in obesity: Is not game of TWO cells but of THREE cells. Nutrition and Immunity Conference Commemorating 75th Birthday of Prof. Gabriel Fernandes, San Antonio, TX, 2011.
- 2. You can do it: 5 STAR Plan for the winning K grant. Trainee Meetings Outside the Box (T-MOB), UTHSCSA, San Antonio, TX, 2012.
- 3. Brain-derived neurotrophic factor intensifies the early inflammatory response after myocardial infarction. 30th annual banquet of Association of Scientists of Indian Origin in America Inc. (ASIOA), San Diego, CA, 2012.
- 4. Role of lipids in obesity, aging and cardiac remodeling. Barshop Seminar Series, UTHSCSA, San Antonio, TX, 2012.
- 5. Cardiac remodeling in the setting of obesity, Cardiovascular Research Conference, University of Alabama, Birmingham, AL, 2012.
- 6. Cardiac remodeling in the setting of obesity, Health and Human Physiology seminar, University of Iowa, Iowa city, IA, 2013.
- 7. Cardiac Remodeling in Response to Myocardial Infarction in Obesity, Department of Medicine Research Seminar, UTHSCSA, San Antonio, TX, 2013.
- 8. Translational Outlook of Cardiac Remodeling in Obesity and Aging, The Nutrition Obesity Research Center and Department of Nutrition Sciences Seminar Series, Birmingham, AL, 2014.
- 9. Resolution of Inflammation Following Myocardial Infarction in the Setting of Obesity, UAB, Birmingham, AL 2014.
- 10. Obesity Superimposed on Aging Magnifies the Inflammatory and Plasma Lipid Mediator Responses Following Myocardial Infarction, Featured Topic in Experimental Biology, San Diego, CA, 2014.
- 11. Overactive Inflammation Impaired Resolution of Inflammation Following Myocardial Infarction in Obese Aging, First Aging Symposium, Department of Biology, College of Arts and Sciences, School of Medicine, and the Comprehensive Center for Healthy Aging, UAB, AL, 2014.
- 12. Defective and Effective Resolution of Inflammation, Department of Pharmaceutical Sciences, Midwestern University, Chicago College of Pharmacy, Chicago, IL, 2014.
- 13. Defective vs Effective Resolution of Inflammation Following Myocardial Infarction, Department of Medicine, Division of Cardiovascular Disease, Cardiology Grant Rounds, UAB, Birmingham, AL, 2014.
- 14. Resolution of Inflammation in Heart Failure Pathology, Northwestern University, Chicago, IL, 2015
- 15. Resolution of Inflammation in Failing and Non-failing Heart, UAB, School of Biomedical Engineering, UAB, Birmingham, AL, 2015.
- 16. Non-Resolving Chemokine Response Dysregulates Cardiosplenic And Cardiorenal Network Following Myocardial Infarction In Aging, Experimental Biology meeting, San Diego, CA, 2016.
- 17. Resolution of Inflammation in Heart Failure Pathology, R. G. Sapkal College of Pharmacy, Nasik, India, June 2016.

- 18. Metabolic Transformation of FATS in Cardiac Remodeling and Heart Failure, Pune, India, June 2016.
- 19. Aging and Ischemic Heart Disease, UAB Comprehensive Cardiovascular Center 5th Symposium, Birmingham, AL, Oct 2016
- 20. Resolution of inflammation and Heart Failure Pathology, School of Dentistry, UAB, Oct, 2016
- 21. Dietary Fat and Heart Failure: Lipotoxicity and Lipoprotection, AHA meeting Scientific session, invited talk, New Orleans, LA, Nov 2016
- 22. Splenic Leukocytes Defines the Resolution of Inflammation and Left Ventricle Healing in Heart Failure Pathology, AHA meeting invited and selected for Functional Genomics and Translational Biology (FGTB) young investigator award finalist competition talk, New Orleans, LA, Nov 2016.
- 23. Metabolic Transformation of FATS in Cardiac Remodeling and Heart Failure, Smt S S Patil College of Pharmacy, Chopda, India, July 2017.
- 24. Splenic Leukocytes Defines the Resolution of Inflammation in Heart Failure Pathology, Bioactive lipid meeting, Puerto Vallarta, Mexico, Oct 2017.
- 25. Metabolic Transformation of Fat in Heart Failure Pathology, University of Houston, TX, Feb 2018.
- 26. Inflammation and Resolution of Inflammation in Heart Failure, Division of Cardiovascular Disease, Cardiology Grand Rounds, UAB, Mar 2018.
- 27. Subacute Exposure of Carprofen Facilitate Splenocardiac Resolution Deficit in Cardiac Injury. Selected as 'Hot Topic' Resolution of Inflammation, Infection and Tissue Regeneration, The New York Academy of Sciences, New York, June 25-26, 2018.
- 28. The Lipidome in Heart Failure Pathology, UAB Comprehensive Cardiovascular Center 5th Symposium, Birmingham, AL, Sep 2018.
- 29. Resolving Post-injury Cardiac Remodeling, AHA Scientific Sessions, invited talk, Chicago, IL, Nov 2018.
- 30. Inflammation and Resolution Signaling in Heart Failure, University of Florida, invited talk, Tampa, FL, Nov 2018
- 31. Resolving and Non-resolving Inflammation Biology in Heart Failure, Human Nutrition, Nutrition & Vascular Health, French National Institute for Agricultural Research, Clermont Fernand, France. Dec 2018
- 32. Splenocardiac and Cardiorenal Network in Heart Failure' UAB Nephrology Research and Training Center (NRTC), Jan 2019.
- 33. Inflammation and Resolution in heart Failure Biology, RIKEN Yokohama institute Center for Life Science Technologies, Yokohama city, Kanagawa, Japan. Feb 2019.
- 34. Leukocyte Directed Inflammation and Resolution in Heart Failure, Tulane University, New Orleans, Louisiana, Aug 2019.
- 35. Resolving and Non-resolving inflammation in Heart Failure. 6th Meeting of European Section and 7th Meeting of North American Section of the International Academy of Cardiovascular Sciences (IACS), Sep 11-14, 2019, Vrnjacka Banja, Serbia
- 36. Defining the Distance of Physiological Inflammation and Resolution in Heart Failure, Division of Cardiovascular Disease, Cardiology Grand Rounds, UAB, Sep 2019.
- Resolving and Non-resolving Inflammation in Heart Failure, 16th International Conference on Bioactive Lipids in Cancer, Inflammation, and Related Diseases and Eicosanoid Research Foundation - Young Investigator Award in Inflammation category, Finalist, Oct 20-23, 2019 St. Petersburg, Florida.
- 38. Inflammation and Resolution Physiology in Heart Failure Pathology, Department of Pharmacology, The University of Tennessee Health Science Center, Memphis, Tennessee, Dec 11, 2019.
- 39. Inflammation and the Resolution of Inflammation in Heart Failure: Preclinical and Clinical Findings, Webinar, Scintica Instrumentation, Aug 18, 2020.
- 40. Integrative Role of Inflammation and Resolution in Cardiac Repair and Heart Failure, Department of Cellular and Integrative Physiology, University of Nebraska Medical Center, Omaha, NE, Jan 29, 2021.
- 41. Live by Choice not Chance, open minded-versus closed-mindset, target service that will take to success in health care and pharmacy profession, eSpectrum Chief guest, 9th Annual Prize Distribution Ceremony, Gosavi College of Pharmacy, Nashik, India, Feb 08, 2021.
- 42. Gut microbiome and cardiac inflammation in obesogenic aging, USF Microbiome, Immunology, and Infection Mitigation Hub, May 13, 2021.
- 43. Inflammation-Resolution Signaling in Heart Failure, Sep 2021 Sanjay Gandhi Postgraduate Institute of Medical Sciences (SGPIMS), Department of Molecular Medicine, Lucknow, (U.P.) 226014, India, 16 Sep 2021
- 44. Macrophage Specific Lipoxygenase Deletion Amplify Cardiac Repair Activating Treg in Chronic Heart Failure (Rapid fire 5 min talk), AHA Scientific Session meeting, Boston, MA, 15 Nov 2021
- 45. Defining the role of gut dysbiosis in inter-organ communication of chronic inflammation, USF, Microbiomes Institute, Microbiome Research Award Workshop, Jan 20-21, 2022
- 46. Interaction of Fat and Leukocyte after Heart Attack, Golden Jubilee Celebration, Department of Pharmaceutical Science and Technology, Birla Institute of Technology, Mesra, Ranchi 835215 (JH), 18th July 2022.
- 47. Differential Fat-derived Endogenous Mediators of Inflammation and Resolution in Heart Failure. The Department of Human Biology, University of Haifa, Israel. Dec 2022 (Scheduled).

Page 14 of 19

- Helpful and harmful lipids in heart failure, Heart Failure Conflux 2023. Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum. 4-5th Feb 2023.
- 49. Inflammation-Resolution Signaling in HFrEF and HFpEF. North American Meeting of the International Society of Heart Research, June 26-30, 2023. (Scheduled)
- 50. Resolving Lipid Mediators in Heart Failure. AHA Basic Cardiovascular Sciences meeting, Boston, MA, 31st Jul- 03 2023. (Scheduled)
- 51. Inflammation-Resolution Signaling in Cardiac Repair. Winter Eicosanoid Conference, Baltimore, MD, October 15-17, 2023. (Scheduled)

B. Areas of Research Interest:

MISSION STATEMENT

My research focuses on inflammation and resolution signaling mechanisms in heart failure that includes:

- 1. Applying multidimensional approaches to define inflammation and resolution signaling in cardiac repair and heart failure;
- 2. Dissecting the mechanism of novel bioactive lipids in cardiac repair, remodeling, and applying strategies to prevent, slow, or reverse the progression of heart failure
- 3. Communicating team results in the form of presentations, reports, and manuscripts

C. Current Projects:

- 1. Genesis of unresolved inflammation in heart health and disease
- 2. Inflammation and resolution signaling in cardiac repair and heart failure
- 3. Lipoxygenase signaling in acute and chronic heart failure

D. Mentoring Experience:

As post-doctoral fellow at University of Texas Health Science Center at San Antonio

- 2010-2012 Peer- mentored Rugmani Iyer, PhD, post-doctoral fellow to complete pharmaceutical company sponsored project
- 2006-2007 Peer-mentored, Nicole Patterson, MS student to complete pharmaceutical company sponsored project

As Principal Investigator at University of Birmingham at Alabama

Postdoctoral trainees

- 2013-present Mentor, Vasundhara Kain, Ph.D.; Thesis at National Center for Cell Science, University of Pune, India (Advisor: Dr. S.L. Sitasvad)
- 2017-2017 Mentor, Ravi Sonkar, Ph.D. Thesis at Central Drug Research Institute, India

As Principal Investigator at University of South Florida Tampa

Postdoctoral trainees/Research Associate

2013-present Mentor, Vasundhara Kain, Ph.D.; Thesis at National Center for Cell Science, University of Pune, India (Advisor: Dr. S.L. Sitasvad)

- 2018-2021 Mentor, Bochra Tourki, Ph.D. Thesis, Tunis Pasteur Institute and Carthage University, Tunisia
- 2020-2020 Mentor, Riya Chatterjee, Ph.D. The University of Mississippi, USA
- 2020-2021 Mentor, Gabriel Araujo Grilo, Ph.D. The University of East Carolina, USA
- 2021 Mentor, Shahriare Hossain, Ph.D. The University of New Mexico, New Mexico, USA
- 2021-present Co-mentor, Dae Hyun Lee, MD, PhD Trainee, University of South Florida, Tampa

Graduate Ph.D. and MD trainees

2013	Rotation mentor, Lamin Touray, Pathobiology and Molecular Medicine (PBMM) Graduate Theme
2014	Rotation mentor, Crystal M Tylor, Cell, Developmental and Integrative Biology Graduate Theme
2014	Rotation mentor, Josh Muhammad, Nutrition Sciences Theme
2014-2018	Dissertation committee member, Yuxi Sun (advisor: Dr. Sethu, Palaniappan, Ph.D.), Non-labeling
	microfluidics cell sorting technology, Biomedical School of Engineering UAB
2014-2017	Dissertation committee member, Kah Yong Goh (Advisor: Dr. Lufang Zhou, Ph.D.), Graduate
	Biomedical Sciences, Cell, Developmental and Integrative Biology, UAB
2015	Retation montor, Laurance M Black, Riochamistry, Structural and Stam Call Riology (RSSR) Thom

2015 Rotation mentor, Laurence M Black, Biochemistry, Structural and Stem Cell Biology (BSSB) Theme 2017 Mentor, Amy Schmitt, Koopman Medical Research Excellence Scholar Award, UAB (MD trainee)

2017 Dissertation committee member, Marcus Davis, (Advisor: Dr. Zdenek Hel, PhD) Graduate Biomedical Sciences, Immunology Theme, UAB
2018 Mentor, David Booker, Summer Trainee (Second year UAB medical student)
2021-2022 Mentor, Yusuf Mat MD, Volunteer fir 3 months, later joined Halade lab as Biological Scientist,

Technical and Pre-Med/Undergraduate Trainees

i ecnnicai a	nd Pre-Med/Undergraduate Trainees
2013	Supervisor, Alicia Kindred, Research Assistant, M. S. Biology, UAB
2013-2017	Supervisor, Kevin A Ingle, Research Associate, M.S. Biotechnology, UAB
2015	Mentor, Alondria McNair, Summer Trainee, UAB
2015-2016	Mentor, Juhi Shah, UAB University Honors Program Student (UHP), UAB
2016	Mentor, Roman Travis, SIBS Undergraduate Summer Research programs, UAB
2016	Mentor, Priscilla Maddox, Summer Trainee, UAB
2017	Mentor, Jeevan Kumar Jaddapalli, University Bordeaux, France.
2017-2019	Supervisor, Jeevan Kumar Jaddapalli Research Assistant, MS, University Bordeaux, France.
2017	Mentor, MeMe Collier, STRIDE Undergraduate Summer Research Fellowship, American
	Physiological Society
2017	Mentor, Ogechukwu Otij, PARAdiGM Undergraduate Summer Research programs, UAB
2017-2018	Supervisor, Griffin M Wright, Research Assistant, M.S. Auburn University
2018-2020	Supervisor, Amanda B Pullen, Research Assistant, B.S. Birmingham-Southern College
2018	Mentor, Veena Krishnan, B.S. Chemistry, Birmingham-Southern College
2018	Mentor, Gabriell N. Cunningham, Sophomore, Jefferson State Community College, Biomedical
	Careers - Community Outreach Development (CORD), The University of Alabama at Birmingham
2018	Mentor, Minwoo Nam, Collegiate Honors Student, The University of Alabama at Birmingham
2019	External thesis supervisory committee member, University of Nebraska Medical Center, Upendra
	Chalise, graduate program theme of Integrative Physiology and Molecular Medicine-IPMM
2019	Science and Technology Honors Program, Sameen Ali, Undergraduate Neuroscience Program, The
	University of Alabama at Birmingham
2019	Mentor, Valerie Merle Spearman, Division Occasional Award, Careers-Community Outreach
	Development (CORD), The University of Alabama at Birmingham.
2019	Mentor, Hannah Douglas the Summer in Biomedical Science (SIBS), The University of Alabama at
	Birmingham
2020	Abrar-Al-Shaer, Dissertation Committee Member, The University of North Carolina at Chapel Hill
2021	Riya Patel, USF undergraduate pre-medical summer volunteer trainee
2022-2022	Nidhi Patel, USF undergraduate pre-medical volunteer trainee

E. Research Support:

1. NATIONAL

Current:

Source:	NIH/NHLBI-R01-HL144788
Title:	Lipoxygenase Signaling in Heart Failure Pathology
Period:	Aug 01, 2019 to Jul 31, 2023
Period:	4 years
Direct Costs/ Current:	\$ 250,000
Year/ Total:	4/ \$ 1,485,500
Role:	Principal Investigator
The goal is to test w	hether macrophage specific lipoxygenase trigger or resolve inflammation following myocardial
infarction in heart failur	е.

2. Pending

Source:	NIH-NHLBI (scored 38 percentile, impact score 45, under review)	
Title:	Resolution of Inflammation and Cardiac Healing after Myocardial Infarction – No overlap	
Role:	Principal Investigator	
The goal is to re-define the role of arachidonate lipoxygenase 5 (ALOX5) in biosynthesis of specialized pro-resolving nediators (SPMs) and cardiac repair following myocardial infarction.		

Source:	NIH-NHLBI R35 (Scored 37 in 2020, 2021 not discussed in Aug 22)
Title:	An Integrative Leukocyte Signaling in Inflammation and Resolution Program in Heart Failure
Role:	Principal Investigator

This comprehensive project deals with the inflammation and resolution mechanisms in cardiac repair and impaired cardiac repair following myocardial infarction in heart failure – No overlap

3. Completed

Source:	NIH/ NHLBI-R01-HL132989-01
Title:	Resolution of Inflammation in Heart Failure Post-Myocardial Infarction
Period:	July 01, 2016 to June 30, 2022 (NCE)
Period:	5 years
Direct Costs/ Current:	\$ 250,000
Year/ Total*:	5/ \$ 1,837,500
Role:	Principal Investigator
The goal is to define the	e role of resolvin D1 bioactive lipid mediator following myocardial infarction in heart failure.
Source: Title: Period: Direct cost/current: Year/Total: Role: The proposed trnaslatic pneumonia.	The University of Alabama at Birmingham (CCVC/I3: Pilot grant) Cardiac dysfunction and remodeling after severe pneumonia - No overlap September 1, 2017 to August 31, 2019 \$25,000 2/\$50,000 Co-investigator (PI: Carlos Orihuela, PhD) onal grant designed to study cardiac dysfunction and cardic remodeling in the setting of servere
Source:	School of Medicine AMC21 2018 1R01-2R01, The University of Alabama at Birmingham
Title:	Lipoxygenase Signaling in Heart Failure Pathology
Period:	September 2018 to August 2020
Direct cost/current:	\$50,000
Year/Total:	2/\$100,000
Role:	Principal Investigator
Source:	NIH/ NICHD R01 (HD095897-01)
Title:	A Mir-486/Dock3 Signaling Axis Modulates Dystrophin-Deficient Pathology
Period:	Aug 17, 2018 to May 31, 2023 (relinquished)
Period:	5 years
Direct Costs/ Current:	\$222,573
Year/ Total*:	5/ \$ 1,112,865
Role:	Co-Investigator (Principal Investigator – Dr. Matthew Scott Alexander)
The goal is to serve car	diac physiology collaborator to define the role of Mir-486 in Dystrophin-Deficient Pathology
Source: Title: Period: Direct cost/current: Year/Total: Role: The goal of this training for Integrative Medical S	American Physiological Society – Research Career Enhancement Award Lipidomics training award, Yokohama City, Kanagawa JAPAN (Dr. Makoto Arita Laboratory for Metabolomics, RIKEN Center for Integrative Medical Sciences) - No overlap August 2018 to August 2019 \$10,460 1/\$10,460 Principal Investigator as trainee (Sponsor and mentor: Dr. Makoto Arita, RIKEN center, Japan) grant to gain training in lipidomics at Dr. Makoto Arita Laboratory for Metabolomics, RIKEN Center Sciences, Japan.
Source:	NIH/NHLBI 1T32HL129948-01
Title:	Basic and Translational Science in Heart Failure
Period:	Oct 01, 2016 to Sep 30, 2021
Period:	5 years

Role: Mentoring and Training Faculty (Principal Investigator – Dr. Prabhu) The objective of this proposal is to establish a post-doctoral research training program in basic and translational heart failure science.

Source:	American Heart Association (16POST31000008)
Title:	Lipoxins in Resolution of Inflammation Following Myocardial Infraction - No overlap

Period:	July 1, 2016 to June 30, 2018
Direct cost/curre	# \$54,150
Year/Total:	2/\$110,300
Role:	Mentor and sponsor (Mentee: Vasundhara Kain)
Source:	NIH/ NCCAM K99/R00 (1K99AT006704-01)
Title:	DHA Mechanisms in Obesity-mediated Cardiac Remodeling Post-Myocardial Infarction
Period:	August 01, 2013 to July 31, 2016
Period:	5 years
Direct Costs/ Co	ent: \$927,000
Year/ Total*:	5/\$1837500
Role:	Principal Investigator
Source :	Michigan Regional Comprehensive Metabolomics Resource Core
Title:	Cardiosplenic Metabolism of DHA and EPA Intermediates Following Myocardial Infarction in
Period: Direct cost/curre Year/ Total*: Role:	Obesity July 1, 2015 to June 30, 2016. :: \$0 (\$33,000 for lipidomic analysis using mass spectrometry) 1/ \$33,000 Principal Investigator
Source:	Amylin Pharmaceuticals, Inc.
Title:	Cardiac Remodeling in a Dahl Salt Sensitive Rat Model
Period:	December 2011 to June 2013
Year/ Total*	1/ \$211,450 (Total)
Role:	Co-Principal Investigator (with Merry Lindsey, PhD)
Source:	Canopus BioPharma
Title:	Cardiac Sarcopenia Study
Period:	June 2012 to May 2013
Year/ Total*	1/ \$246,456 (Total)
Role:	Co-Principal Investigator (with Merry Lindsey, PhD
<u>Responsible co</u> 2013 2013 2013 2014 2014 2014 2014 2019 IV. SERVICE B. Professiona	AB Enterprise Code of Conduct, UAB (0.5 hr) sing Animals for Teaching, Testing, and Research at UAB, UAB (8 hr) iversity Awareness Education, UAB 2 hr) ifort Reporting: Responsible Fiscal Management of Sponsored Projects, UAB (1 hr) entoring Academy, UAB (7 hr) entor the Mentor Workshop, UAB (1.5 hr) rant Writing Workshop; Strategies for Successful Grant Submissions, UAB (6hr)
1. Scientific O	anizations and Societies membership
Year(s)	rganization
2007-2011	merican Society of Nutrition
2010-present	merican Heart Association
2011-2012	ociety for Experimental Biology and Medicine
2012-present	merican Physiology Society
2012-2013	merican Society for Investigative Pathology
2. Other Profe Year(s) 2020 2010-2011 2010-2012 2014 2014 2013	ional Activities:ActivityrganizationActivitySF Health Research DayJudgeedical student posters review in an annual competition to select the top 6 postersJudgeTHSCSA Medical Student Research Review Committee (4-6 application /year)Revieweromprehensive Cardiovascular Center 3 nd Annual SymposiumPoster Reviewer5th Annual Vascular Biology and Hypertension Symposium, UABJudgeost-doc creativity prize applications – NORC, University of Alabama at BirminghamReviewer

2012	Summer Research Expo 2012, University of Alabama at Pirmingham (UAR)	ludao
2013	24th Annual Vascular Biology and Hypertension Symposium UAB	Judge
2013	Graduate Riemodical Science, Winter Poster Session	Judge
2014	20th Appual Traince Persoarch Symposium Dept of Medicine LIAP	Judge
2014 2012 proc	Comprehensive Cerdievescular Center 2nd Annual Symposium	Doctor Poviowor
2013-pies	Medical Student Descarch Dev Destar, Judaing Committee, UTHCSA	
2009-2010	Medical Student Research Day Poster Judging Committee - UTHCSA	Juage
2008-2012	Nedical Student Summer Stipend Review Committee - UTHSCSA	Reviewer Editorial haard
2013-present	Journal of Cardiology and Clinical Research	Editorial board
2014-present	Frontiers in Cardiovascular Medicine	Editorial board
2013-present	Journal of Biological Research and Development	Editorial board
2013-present	Journal of Cardiology and Therapy	Editorial board
2013-present	Lipids and Health Disease	Reviewer
2013-present	American Journal of Physiology – Heart and Circulatory	Associate Editor
2021-present	American Journal of Physiology – Heart and Circulatory	Consulting Editor
2016-present	American Journal of Physiology-Regulatory, Integrative and Comparative Physiology	Reviewer
2013-present	Physiological Genomics	Reviewer
2012-present	Cardiovascular Endocrinology	Reviewer
2011-present	Drug Development and Industrial Pharmacy	Reviewer
2012-present	Drugs in R and D	Reviewer
2016-present	Diabetes	Reviewer
2011-present	European Journal of Pharmacology	Reviewer
2011-present	Experimental Physiology	Reviewer
2019-present	F1000Research	Reviewer
2012-Present	Food and Function	Reviewer
2011-present	International Journal of Biological Macromolecules	Reviewer
2013-present	Inflammation	Reviewer
2020-present	Iscience	Reviewer
2011-present	Journal of Endocrinology	Reviewer
2012-present	Journal of Molecular and Cellular Cardiology (Outstanding reviewer 2015)	Reviewer
2013-present	Life Science	Reviewer
2013-present	Journal of Vascular Research	Reviewer
2013-present	Omics publishing group	Reviewer
2015-present	Scientific Reports	Associate editor
2011-present	Thrombosis Research	Reviewer
2016-present	Circulation Research	Reviewer
• Jan 202	21-Dec 2021- reviewed >35 manuscripts and handled review of 3 manuscripts as an a	ssociate editor

V. Other

C. Other Professional Activities:

- 1. Co-chair and moderated "Using Proteomics to Understand the Inflammation" San Antonio Cardiovascular Proteomics Center at 3rd Principal Investigators meeting at San Antonio, TX, Feb 14, 2012.
- 2. Chair and moderator, 3rd symposium, Comprehensive Cardiovascular Center themed Frontiers in Diabetes-Related Cardiovascular Disease From Bench to Bedside to Community, 2011
- 3. Moderator, Fibroblasts and fibrosis...fast, American Heart Association meeting, Nov 12-15, 2016, New Orleans, LA,
- 4. Chair, Inflammation and immunity and heart disease session, Experimental Biology meeting, 22-16 April, 2017
- 5. Co-chair, 'Peptides and Metabolites in Cardiovascular Disease', Experimental Biology meeting, 22-16 April, 2017
- 6. Chair Inflammation and Leukocyte Biology in Cardiovascular Disease, American Physiology Society featured topic symposium, Cardiovascular Section, Experimental Biology meeting, Orlando, FL April 6-10, 2019
- 7. Moderator, New Frontiers in the Regulation of Cardiac Gene Expression, American Heart Association, Basic Cardiovascular Sciences meeting, Jul 28-Aug 1, 2019 Boston, MA.
- Chair and Judge with Marks Andrew (New York) and Gulati Kavita (India) Roberto Bolli Young Investigator Award, 6th Meeting of European Section and 7th Meeting of North American Section of the International Academy of Cardiovascular Sciences (IACS), Sep 11-14, 2019, Vrnjacka Banja, Serbia
- 9. Moderator, American Heart Association, Scientific Session meeting, Dec16-18, 2019 Philadelphia, PA.
- Moderator, American Heart Association, Basic Cardiovascular Sciences, Bridging Basic and Translational Science in Cardiovascular Disease, Session 13: Cardio-immunology, Inflammation and Cardiac Pathophysiology, Chicago, IL. July 25-28, 2022
- 11. Hosting guest speaker visits: Jun Yoshioka, MD, PhD, Brigham and Women's Hospital, Boston, MA

Peter Rabinovitch, MD University of Washington, Seattle, WA Thomas Vondriska, PhD University of California, Los Angeles, CA Giulio Agnetti, PhD, Johns Hopkins University, Baltimore, MD Sakthivel Sadayappan, PhD Loyola University Chicago, IL Gregory Lanza, MD, PhD, Washington University School of Medicine, St. Louis, MO Venkateswaren Subramanian, PhD, University of Kentucky, Lexington, KY