

Padmini Varadarajan, MD, FACC

Dated: 3-2-2020

Address (W): Tenured Professor of Medicine, Vice Chair of Medicine, Chief of Cardiovascular Medicine, UC Riverside School of Medicine, 900 University Avenue, Riverside, CA 92521

Licensure: CA # A67664 MI: Inactive MA: Inactive

Brief Overview:

Professor of Medicine and academic cardiologist board certified in internal medicine, cardiology, echocardiography, adult congenital heart diseases and cardiac computed tomography. Currently Tenured, ladder rank Professor of Medicine (step IV), executive vice chair of internal medicine and chief of cardiovascular medicine, UCR School of Medicine. Advanced cardiac imager (Advanced level III in echocardiography, cardiac MRI and Cardiac CT) with additional expertise in valvular heart diseases and adult congenital heart disease. Author of 62 peer reviewed manuscripts, 78 abstracts, 6 books in cardiology and 21 book chapters. Functioned as a coinvestigator in NIH supported STICH trial MRI Corelab, NIH supported diabetic cardiomyopathy study and DOE supported Robotics project for cardiovascular applications. Invited faculty member in multiple national and international conferences related to cardiology. Mentor for >25 internal medicine residents and cardiology fellows in their research and career guidance over the last 12 years. Invited to join and am a member of the American College of Cardiology (ACC) Diversity and Inclusion Committee and Imaging Section web page in 2019.

Professional Certifications:

MBBS (1992): Gandhi Medical College, Osmania University, Hyderabad, India
ABIM (1999): American Board of Internal Medicine IM Certified
ABIM (2003, 13): ABIM Cardiovascular Board Certified
ASexAm(2004, 15): National board of echocardiography certified in Echocardiography
Cardiac CT (2012): Society of Cardiovascular CT - Cardiac CT Board Certified
ABIM (2017): ABIM Certified in Adult Congenital Heart Diseases (ACHD)

Professional training:

1991-92: Intern, Gandhi Hospital, Hyderabad, India
1994 : Senior House Officer, Institute of Mental Health, Hyderabad
1995-1996: Post Doc/visiting Scholar, Cancer Research Center, UCSD
1996-1999: Resident, Internal Medicine, Henry Ford Hospital, Detroit
1999-2002: Fellow, Adult Cardiology, Loma Linda University, Loma Linda
2002-2003: Advanced Echo Fellow, Loma Linda University, Loma Linda, CA
2003-2005: Cardiac MRI fellow, USC/Keck School of Medicine, Los Angeles, CA

Professional / Academic Positions:

2002-2003: Asst. Professor, Loma Linda Univ School of Medicine, Loma Linda, CA
2004-2006: Asst. Professor, USC/Keck School of Medicine, CA
2006-2010: Assistant Professor of Medicine, Loma Linda Univ School of Medicine
2010-2013: Associate Professor of Medicine, Loma Linda Univ School of Medicine
2013-2020: Full Professor of Medicine, Loma Linda University School of Medicine
3-1-2020 -: Ladder rank, tenured Professor of Medicine (step IV), UCR School of Medicine

Professional Administrative positions:

2005- 2006: Associate Director CMR Core Laboratory, STICH Trial
2006-2013: Associate Director, Heart & Imaging Center, Loma Linda University Medical Center, CA
2006-20: Director of Cardiac MRI laboratory (cardiology), Loma Linda University Medical Center, CA
2018-20: Chair of Research, Cardiology, Loma Linda University School of Medicine,
2020- : Executive Vice Chair Department of Internal Medicine, UC Riverside School of Medicine
2020- : Chief, Cardiovascular Medicine, UC Riverside School of Medicine
2020- : Associate program director of Cardiovascular Fellowship Program, UCR School of Medicine

In my role as the Associate Director of the CMR Core lab of this largest surgical trial sponsored by NHLBI , I managed and oversaw all aspects of this core lab (receiving and processing of all CMR images, maintenance of the imaging database and timely uploading of the CMR database to Duke Clinical Research Institute).

In my role as Associate Director of Heart and Imaging Center, I set up a comprehensive imaging center (including echocardiography, stress echocardiography, Routine and stress CMR) along with a clinic where in the patients received their care at a single visit, a “one-stop shop”.

In my role as Director of CMR lab, I helped establish cardiac MRI at Loma Linda University. This role entailed working with clinical engineers from the vendors to optimize image sequences, getting it ready for clinical use, training and teaching technologists and maintaining quality and incorporating new sequences.

As the chair of research, I am responsible for supervision of all research including clinical trials for the department of medicine

Professional Society Memberships:

1999-: American Heart Association, Council of clinical Cardiology

1999-: American College of Cardiology

1999-: American Society of Echocardiography

2003: Society of Cardiovascular Magnetic Resonance

2016-: International society of adult congenital heart diseases

Academic Honors:Move out

1983: **State Merit Scholarship, AP, India**

1985: **State Merit Scholarship, AP, India**

1991: Dr. A.B.N Rao **Gold** medal in ENT

1999: **Senior resident of the year**, Henry Ford Hospital, Detroit

2001: HFSA travel grant, Washington DC

2001: **Women in Cardiology** travel grant, AHA, Anaheim, CA

2001: Cardiology Fellows Forum of Excellence, AHA, CA

2003: **AACIO Young Investigators** Award. AHA, Orlando, Fl

2004: HFSA travel grant to present an abstract in Toronto

2004: Selected as one of the fellows for the Cardiology Report for HFSA

2016: Contributions to Cardiology, AACIO

Research Summary and Statement:

In spite of carrying 100% clinical responsibilities I have been actively engaged in scholarly and research activities which have resulted in numerous publications. As listed above, I have been a co-Investigator of NIH funded trials Co-investigator such as STICH CMR Core Laboratory HL 07268305, 50% effort Co-investigator, Prediction of cardiomyopathy in type 1 diabetics using 31 Phosphorus MRS HL073412-05, 20% effort, Co-investigator, DOE (Development of Advanced Surgical Robotics (DARS) DE/FG02/05ER 64128, 10% effort. I have helped build databases in Cardiology, and trained medical students, residents, Fellows in the use of these databases. I have helped the trainees with statistical analysis, drafting manuscripts, revision and final submission of many manuscripts. I have ongoing collaborations with Investigators in the UCR School of Engineering to start and grow an imaging research program in the areas of Cardiac Magnetic Resonance Imaging and Cardiac Ultrasound. I have been collaborating with Professor Xiaoping Hu (Chair of Biomedical Engineering at UCR), Professor Ramdas G Pai (Chair of Clinical Sciences at UCR) and Professor Debao Li (Director of Imaging Research at Cedar Sinai Medical Center in Los Angeles) in setting up CMR research at CAN/UCR. These cover the areas of coronary artery imaging (lumen, plaque, hot spot imaging, flow and noninvasive FFR) diffusion tensor imaging (to image myocardial fiber orientation to get insights into cardiomyopathies and arrhythmias), arterial spin labeling imaging (for noncontrast, quantitative myocardial blood flow analysis), motion resolved cardiac imaging etc. I am the lead investigator in several of these planned projects with the goal of applying for NIH and NSF funding.

Peer reviewed Technical papers:

1. Pai RG, **Varadarajan P**, Tanimoto M. Effect of atrial fibrillation on the dynamics of mitral annular area. J Heart Valve Dis 2003; 12: 31-37. Main role was in statistical analysis and manuscript writing
2. **Varadarajan P**, Pai RG. Prognosis of Congestive Heart Failure in Patients with Normal versus Reduced Ejection Fractions: Results from a Cohort of 2258 Hospitalized Patients. J Cardiac Fail 2003; 12:31-37 (Main role was in statistical analysis, writing and submitting the manuscript)

3. Nehme A, **Varadarajan P**, Sellakumar G, et al. Modulation of docetaxel-induced apoptosis and cell cycle arrest by All-trans retinoic acid in prostate cancer cells. *Br J Cancer*. 2001 Jun 1; 84(11):1571-6. (Main role was in conducting experiments with prostate cancer cell lines with retinoic acid, data analysis and writing of the manuscript)
4. Pai RG, **Varadarajan P**. Relative duration of the transmitted mitral A wave as a measure of left ventricular end-diastolic pressure and stiffness. *Echocardiography*. 2004 Jan; 21(1):27-31. (main role was in manuscript writing and submission)
5. **Varadarajan P**, Jutzy KR, Pai RG. Unique Doppler pattern of “Obstruction Alternans” of a St. Jude prosthetic mitral valve. *J Am Soc Echocardiogr*. 2003 Aug; 16(8):890-3. (main role was in writing and submission of the manuscript)
6. **Varadarajan P**, Pohost GM. Bicuspid aortic valve is heritable. *Curr Cardiol Rep*. 2005 Jan; 7(1):38 (Review). (main role was in writing and submission of the manuscript)
7. **Varadarajan P**, Pohost GM. Quantification of stenotic mitral valve area with magnetic resonance imaging: comparison with Doppler ultrasound. *Curr Cardiol Rep*. 2005 Jan; 7(1):37 (Review). (main role was in writing and submission of the manuscript)
8. **Varadarajan P**, Sharma S, J T Heywood, **Pai RG**. High Prevalence of Silent Severe Mitral Regurgitation in Patients with Congestive Heart Failure: Its Diagnostic and Management Implications. *J Am Soc Echocardiogr*. 2006 Dec;19(12):1458-61. (Main role was in database construction, supervision of resident (Sharma), statistical analysis, writing the manuscript and submission)
9. **Varadarajan P**, Gandhi S, Sharma S, Umakanthan B, Pai RG. Prognostic Significance of Hemoglobin Level in Congestive Heart Failure Patients With Normal Compared to Reduced Ejection Fraction. *Clin Cardiol*. 2006 Oct; 29(10):444-9. (Main role was in database construction, supervision of resident Sharma, Umakanthan, Gandhi), statistical analysis, writing the manuscript and submission)
10. **Varadarajan P**, Isaeff D, Pai RG. Prosthetic Valve Thrombosis Presenting as an Acute Embolic Myocardial Infarction in a Pregnant Patient: Issues on Anticoagulation Regimens and Thrombolytic therapy. *Echocardiography*. 2006 Oct; 23(9):774-9. (Main role was writing the manuscript and submission)
11. **Varadarajan P**, Kapoor N, Bansal RC, Pai RG. Clinical Profile and Natural History of 453 Nonsurgically Managed Patients with Severe Aortic Stenosis. *Ann Thorac Surg*. 2006 Dec; 82(6):2111-5. (Main role was in database construction, supervision of resident (Kapoor), statistical analysis, writing the manuscript and submission)

12. Pai RG, Kapoor N, Bansal RC, **Varadarajan P**. Malignant Natural History of Asymptomatic Severe Aortic Stenosis: Benefit of Aortic Valve Replacement. *Ann Thorac Surg*. 2006 Dec;82(6):2116-22 (Main role was in database construction, supervision of resident (Kapoor), statistical analysis, writing the manuscript and submission)
13. **Varadarajan P**, Kapoor N, Bansal RC, Pai RG. Survival in elderly patients with severe aortic stenosis is dramatically improved by aortic valve replacement: results from a cohort of 277 patients aged ≥ 80 years. *Eur J Cardiothorac Surg*. 2006 Nov;30(5):722-7. (Main role was in database construction, supervision of resident (Kapoor), statistical analysis, writing the manuscript and submission)
14. **Varadarajan P**, Pai RG, Pohost GM. A role for cardiac resynchronization therapy in heart failure patients with atrial fibrillation. *Curr Cardiol Rep*. 2006 Nov;8(6):387-8 (Review). (Main role was in writing the manuscript and submission)
15. Farvid A, Goel M, **Varadarajan P**, Pai RG. Noncatheter-associated vegetative phlebitis of the superior vena cava presenting with multiple lung abscesses. *Echocardiography*. 2006 Aug;23(7):596-7. (Main role was in writing the manuscript and submission, Goel was the resident trainee)
16. Puri P, Sarma R, Ostrzega EL, **Varadarajan P**, Pai RG. Massive posterior mitral annular calcification causing dynamic left ventricular outflow tract obstruction: mechanism and management implications. *J Am Soc Echocardiogr*. 2005 Oct;18(10):1106. (Main role was in writing the manuscript and submission, supervised the work of resident Puri)
17. Kapoor N, Varadarajan P, **Pai RG**. Echocardiographic Predictors of Pulmonary Hypertension in Patients with Severe Aortic Stenosis. *Eur J Echocardiogr*. 2008 Jan;9(1):31-320. (Main role was in database construction, supervision of resident (Kapoor), statistical analysis, writing the manuscript and submission)
18. Pai RG, **Varadarajan P**. Prognostic significance of atrial fibrillation is a function of left ventricular ejection fraction. *Clin Cardiol* 2007 Jul;30(7):349-54. (Main role writing the manuscript and submission)
19. Pai RG, **Varadarajan P**. Aortic Valve Replacement in Asymptomatic Aortic Stenosis: Time to Reconsider "Watchful Expectancy". *Ann Thorac Surg* 2007, 84:356-357 (Main role was in writing the manuscript and submission)

20. Pai RG, **Varadarajan P**, Kapoor N, Bansal RC. Aortic Valve Replacement Improves Survival In Severe Aortic Stenosis Associated With Severe Pulmonary Hypertension. *Ann Thorac Surg.* 2007 Jul;84(1):80-5 (Main role was in database construction, supervision of resident (Kapoor), statistical analysis, writing the manuscript and submission)
21. Pai RG, **Varadarajan P**. Echocardiography And Cardiovascular Magnetic Resonance: Evolution As Complementary Imaging Tools. *Current Cardiol Reports* 2006 May;8(3):155-7(Main role was in writing the manuscript and submission)
22. Pai RG, **Varadarajan P**, Pohost GM Present role of echocardiography in the era of CT and MR. *Diagnostic Imaging* 2006 (Main role was in writing the manuscript and submission)
23. **Varadarajan P**, Pai RG, Pohost GM. A role for cardiac resynchronization therapy in heart failure patients with atrial fibrillation (Invited commentary) *Current Cardiology Rep.* 2006 Nov;8(6):387-8 (Main role was in writing the manuscript and submission)
24. Narayan V, **Varadarajan P**, Pai RG. Assessment of left ventricular syssynchrony in patients with heart failure and normal QRS duration. *Congestive Heart Failure* 2007;13:329-335 (Review) (Main role was in supervision of resident (Narayan), writing the manuscript and submission)
25. **Varadarajan P**, Joshi N, Duvvuri L, Appel D, Pai RG. Effectof Beta Blocker Therapy On Survival In Patients With Severe Mitral Regurgitation And Normal Left Ventricular Ejection Fraction. *Am J Cardiol.* 2008 Sep 1;102(5):611-5. (Main role was in database construction, supervision of residents (Joshi, Duvvuri), medical student (Appel), statistical analysis, writing the manuscript and submission)
26. Liu CY, **Varadarajan P**, Pohost GM, Nayak KS. Real-time color-flow MRI at 3 T using variable-density spiral phase contrast. *Magn Reson Imaging.* 2008 Jun;26(5):661-6 (Main role was in image acquisition,database construction, supervision of Electrical engineering postdoc (Liu), statistical analysis, writing the manuscript and submission)
27. Pai RG, **Varadarajan P**, Razzouk A. Survival benefit of aortic valve replacement in patients with severe aortic stenosis with low ejection fraction and low gradient with normal ejection fraction. *Ann Thorac Surg.* 2008 Dec;86(6):1781-9 (Main role was in database construction, supervision of resident, statistical analysis, writing the manuscript and submission)
28. Khandhar S, **Varadarajan P**, Turk R, Kamath A, Sampat U, Patel R, Pai RG. Clinical Correlates and Survival Benefit of Aortic Valve Replacement in Severe Pulmonary Hypertension Associated with Severe Aortic Regurgitation. *Ann Thorac Surg.* 2009 Sep;88(3):752-6. (Main role was in

- database construction, supervision of resident (Khandhar, Sampat, Patel), fellow (Turk), student (Kamath), statistical analysis, writing the manuscript and submission)
29. Sampat U, **Varadarajan P**, Turk R, Patel R, Kamath A, Khandhar S, Pai RG. Survival Benefit with Beta Blocker Therapy In A Cohort Of 583 Patients with Severe Aortic Regurgitation. *J Am Coll Cardiol* 2009; 28;54(5):452-7 (Main role was in database construction, supervision of resident Sampat, Patel, Khandhar), Student (Kamath), fellow (Turk), statistical analysis, writing the manuscript and submission)
 30. Kamath A, BA, **Varadarajan P**, Turk R, Sampat U, Khandhar S, Pai RG, Aortic Valve Replacement Confers Large a Survival Benefit In Severe Aortic Regurgitation Patients With Ejection Fraction $\leq 35\%$: Results From A Cohort of 159 Patients. *Circulation*. 2009 Sep 15;120(11 Suppl):S134-8 (Main role was in database construction, supervision of resident Sampat, Patel, Khandhar), Student (Kamath), fellow (Turk), statistical analysis, writing the manuscript and submission)
 31. Turk R, **Varadarajan P**, Kamath A, Sampat U, Pai RG. Survival Benefit of Aortic Valve Replacement in Older Patients with Asymptomatic Chronic Severe Aortic Regurgitation. *Ann Thorac Surg*. 2010 Mar;89(3):731-7.127. (Main role was in database construction, supervision of resident Sampat, Patel, Khandhar), Student (Kamath), fellow (Turk), statistical analysis, writing the manuscript and submission)
 32. Pai RG, **Varadarajan P**. Prognostic implications of mitral regurgitation in patients with severe aortic regurgitation. *Circulation* 2010 122(11 Suppl):S43-7. (Main role was in database construction, supervision of resident, statistical analysis, writing the manuscript and submission)
 33. **Varadarajan P**, Pai RG. Tricuspid regurgitation in patients with severe mitral regurgitation and normal left ventricular ejection fraction: risk factors and prognostic implications in a cohort of 895 patients. *J Heart Valve Dis* 2010 Jul;19(4):412-9. (Main role was in database construction, supervision of resident, statistical analysis, writing the manuscript and submission)
 34. Dua A, Dang P, Shaker R, **Varadarajan P**, Pai RG. Barriers To Surgery In Severe Aortic Stenosis Patients With Class I Indications For Aortic Valve Replacement. *J Heart Valve Dis* 2011; 2011 Jul;20(4):396-400. (Main role was in database construction, supervision of resident (Dua, Dang, Shaker), statistical analysis, writing the manuscript and submission)
 35. **Varadarajan P**, Pai RG. Prognostic implications of tricuspid regurgitation in patients with severe aortic regurgitation: results from a cohort of 756 patients. *Interact Cardiovasc Thorac Surg*. 2012 May;14(5):580-4. Epub 2012 Feb 17. (Main role was in database construction, statistical analysis, writing the manuscript and submission)

36. Aftab W, Mlotowsky J, **Varadarajan P**, Pai RG. Dobutamine stress induced embolism in a patient with prosthetic mitral valve despite normal function. *J Heart Valve Dis* 2012 May 21(3):407-9. (Main role was in database construction, supervision of resident (Aftab), statistical analysis, writing the manuscript and submission)
37. Zun Z, **Varadarajan P**, Pai RG , Wong EC, Nayak, KS. Arterial spin labeled MRI detects clinically relevant increases in myocardial blood flow with vasodilatation. *JACC Cardiovasc Imaging*. 2011 Dec;4(12):1253-61. (Main role was in database construction, supervision of electrical Engineering students (Zun), statistical analysis, writing the manuscript and submission)
38. Patel R, Kamath A, **Varadarajan P**, Krishnan S, Pai RG. Slow rate of progression of grade 1 and 2+ aortic regurgitation. *J Heart Valve Dis*. 2012 May;21(3):328-30. (Main role was in database construction, supervision of resident (Patel), statistical analysis, writing the manuscript and submission)
39. Nathan M, **Varadarajan P**, Heidary S, Pai RG. Practical strain and strain rate imaging with clinical examples (monograph review). *Cardiac Ultrasound today* 2012, 18(6): 117-144. ISSN 1080-4064. (Main role was in supervision of resident (Nathan), Fellow (Heidari), image acquisition, writing the manuscript and submission)
40. Lin T, Rechenmacher S, Rasool S, **Varadarajan P**, Pai RG. Reduced survival in patients with "coronary microvascular disease". *Int J Angiol*. 2012 Jun;21(2):89-94. doi: 10.1055/s-0032-1315799. PMID: 23730136 (Main role was in database construction, supervision of student (Rechenmacher), fellow (Lin, Rasool), statistical analysis, writing the manuscript and submission)
41. **Varadarajan P**, Patel R, Turk R, Kamath AR, Sampath U, Khandhar S, Pai RG. Etiology impacts survival in patients with severe aortic regurgitation: results from a cohort of 756 patients. *J Heart Valve Dis*. 2013 Jan;22(1):42-9. PMID: 23610988 (Main role was in database construction, supervision of resident Sampat, Patel, Khandhar), Student (Kamath), fellow (Turk),, statistical analysis, writing the manuscript and submission)
42. Aftab W, **Varadarajan P**, Rasool S, Kore A, Pai RG. Beta and angiotensin blockades are associated with improved 10-year survival in renal transplant recipients. *J Am Heart Assoc*. 2013 Feb 19;2(1):e000091. doi: 10.1161/JAHA.112.000091. PMID: 23525422 (Main role was in database construction, supervision of resident (Aftab), Fellow (Rasool), statistical analysis, writing the manuscript and submission)
43. Swamy P, Bharadwaj A, Varadarajan P, Pai RG. Echocardiographic Evaluation of Tetralogy of Fallot. *Echocardiography*. 2014 May 29 (Main role was in supervision of resident (Swamy, Bharadwaj), image acquisition, writing the manuscript and submission)

44. Hari P, Pai RG, Varadarajan P. Echocardiographic Evaluation of Patent Foramen Ovale and Atrial Septal Defect. *Echocardiography*. 2014 May 29 (Main role was in supervision of resident (Hari), image acquisition, writing the manuscript and submission)
45. Aftab W, **Varadarajan P**, Rasool S, Pai RG. Predictors and prognostic implications of major adverse cardiovascular events after renal transplant: 10 years outcomes in 321 patients. *Int J Angiol*. 2014 Jun;23(2):131-8 (Main role was in database construction, supervision of resident (Aftab), statistical analysis, writing the manuscript and submission)
46. Holly TA, Bonow RO, Arnold JM, Oh JK, **Varadarajan P**, Pohost GM, Haddad H, Jones RH, Velazquez EJ, Birkenfeld B, Asch FM, Malinowski M, Barretto R, Kalil RA, Berman DS, Sun JL, Lee KL, Panza JA. Myocardial viability and impact of surgical ventricular reconstruction on outcomes of patients with severe left ventricular dysfunction undergoing coronary artery bypass surgery: Results of the Surgical Treatment for Ischemic Heart Failure trial. *J Thorac Cardiovasc Surg*. 2014 Dec;148(6): 2677-84 (Main role was in database construction of CMR database, statistical analysis, writing the manuscript)
47. Aftab W, Gazallo J, Motabar A, **Varadarajan P**, Deedwania PC, Pai RG. Survival benefit of statins in hemodialysis patients awaiting renal transplantation. *Int J Angiol*. 2015;24:105-12 (Main role was in database construction, supervision of resident (Aftab, Gazallo, Motabar), statistical analysis, writing the manuscript and submission)
48. Pai RG, **Varadarajan P**. Deeper into Cardiac Amyloid: Potential for Improved Outcomes (Invited Editorial comment). *JACC Cardiovasc Imaging*. 2016 Sep 8. pii: S1936-878X(16)30533-2. doi: 10.1016/j.jcmg.2016.05.016. (Main role was in writing the manuscript and submission)
49. Pai RG, **Varadarajan P**, Rouleau JL, Stebbins AL, Velasquez EJ, Al-Khalidi HR, Pohost GM. Value of Cardiovascular Magnetic Resonance Imaging Derived Baseline Left Ventricular Ejection Fraction and Volumes for Precise Risk Stratification of Ischemic Cardiomyopathy Patients: Insights From the Surgical Treatment of Ischemic Cardiomyopathy (STICH) Trial. *JAMA Cardiol*. 2017 Feb 15. doi: 10.1001/jamacardio.2016.5492. (Main role was in database construction of CMR database, statistical analysis, writing the manuscript)
50. Prior DL, Stevens SR, Holly TA, Krejca M, Paraforos A, Pohost GM, Burd K, Jones RH, Desvigne-Nickens P, **Varadarajan P**, Amanullah A, Lin G, Al-Khalidi HR, Aldea G, Santambrogio C, Bochenek A, Berman DS. Regional left ventricular function does not predict survival in ischemic cardiomyopathy after cardiac surgery. *Heart* 2017 Apr 26 (Epub ahead of printing) (Main role was in database construction of CMR database, statistical analysis, writing the manuscript)

51. **Varadarajan P**, Pai RG. Can 3D Echocardiography replace computed tomographic imaging for aortic annulus sizing before transcatheter aortic valve replacement? (Editorial comment). *Echocardiography*. 2017 May;34(5):636-637. doi: 10.1111/echo.13544. (Main role was in writing the manuscript and submission)
52. **Varadarajan P**, Pai RG. Missed subvalvular aortic stenosis: Insights and Implications (Editorial comment). *Echocardiography*. 2017 Aug;34(8):1120-1121. doi: 10.1111/echo.13634. (Main role was in writing the manuscript and submission)
53. Pena IL, Zheng Qi, Shi L, Szwad H, Lang IM, Farsky PS, Castelvichio S, Biernat J, Paraforos A, Kosevic D, Favalaro LE, Nicolau JC, **Varadarajan P**, Velasquez E, Pai RG, Cyrille N, Lee KL, Desvigne-Nickens P. Sex Difference in Patients With Ischemic Heart Failure Undergoing Surgical Revascularization. Results From the STICH Trial (Surgical Treatment for Ischemic Heart Failure) *Circulation*. 2018;137:771–780. (Main role was in database construction of CMR database, statistical analysis, writing the manuscript and submission).
54. Pellikka PA, She L, Holly TA, Lin G, Varadarajan P, et al. Variability in Ejection Fraction Measured by Echocardiography, Gated Single-Photon Emission Computed Tomography and Cardiac Magnetic Resonance in Patients with Coronary Artery Disease and Left Ventricular Dysfunction. *JAMA Netw Open*. 2018 Aug 3;1(4):e181456. doi: 10.1001/jamanetworkopen.2018.1456. PMID: 30646130
55. **Varadarajan P**, Pai RG. Suitability for mitral balloon valvotomy: An integrated echocardiographic approach. *Echocardiography*. 2017 Sep;34(9):1272-1274. doi: 10.1111/echo.13669 (Main role was in writing the manuscript and submission)
56. **Varadarajan P**, Pai RG. Strings of the Heart (Editorial comment). *J Am Soc Echocardiogr*. 2017 Dec;30(12):1169-1171. doi: 10.1016/j.echo.2017.10.007. (Main role was in writing the manuscript and submission)
57. **Varadarajan P**, Pai RG. Standardized echocardiography protocol for adults with congenital heart disease. *Int J Cardiol*. 2018 Dec 1;272:86-87 (Editorial). (Main role was in writing the manuscript and submission): Corresponding author.
58. **Varadarajan P**. Variable position of esophagus, a conundrum for blind transesophageal probe insertion. *Echocardiography*. *Echocardiography*. 2018 Oct;35(10):1497-1498. doi: 10.1111/echo.14135. (Editorial). (Formulation of editorial comments, writing and submission of manuscript): Corresponding author.
59. Ahmed K, **Varadarajan P** (corresponding author): Evaluation of transposition of great arteries. *Echocardiography* 2019 (in press)

60. Ahmed K, **Varadarajan P** (corresponding author): Atrial septal defect and patent foramen ovale. Echocardiography 2019 (in press)
61. Kanakriyah M, Nayak S, **Varadarajan P** (Corresponding author): Evaluation of AV canal defects. Echocardiography 2019 (in press)
62. Kanakriyah M, Nayak S, **Varadarajan P** (Corresponding author): Evaluation of ventricular septal defects. Echocardiography 2019 (in press)
63. **Varadarajan P**, Pai RG, Knutsen SF, Jabo, B, Mashchak A, Herring P, Fraser GE. Vegetarianism and lower risk of stage B heart failure. JAMA Cardiology (Under review. Corresponding author).
64. **Varadarajan P**, Pai RG. Gender Effects on Biological Behavior, Therapeutic Decisions and Survival in Patients with Severe Aortic Regurgitation Results from a cohort of 756 patients With Up to 22 year Follow up. Circulation Outcomes. (In preparation. Corresponding author).
65. **Varadarajan P**, Pai RG. Effect of beta-blocker therapy on survival in patients with severe aortic regurgitation results from a cohort of 756 patients with 20 year follow up. J Am Coll Cardiol (In preparation. Corresponding author).
66. Patel M, Goud A, Hasan A, Pai, RG, **Varadarajan P**. Angiotensin Converting Enzyme Inhibitor Therapy is Associated With Reduced Survival in Patients with Severe Aortic Regurgitation: A 20 Year Follow up in 756 Patients (In preparation. Corresponding author).

Abstracts published and presented at national meetings:

1. **Varadarajan P**, Pai RG. Hospitalized Patients With Diastolic Heart Failure Have a Worse Prognosis Compared to Those With Systolic Heart Failure Despite Lesser Co-morbidities: Results From a Cohort of 2258 Patients. J Card Fail 2001; 7 (suppl 2): 80.
2. **Varadarajan P**, Sharma S, Pai RG. Identifiable Etiology is associated with a Better Prognosis in Heart failure Patients with Normal or Near Normal Systolic Function: Results from a Cohort of 1398 Patients. J Card Fail 2001; 7 (suppl 2): 71.
3. Pai RG, **Varadarajan P**. Prognostic implications of mitral regurgitation in patients with myocardial infarction. J Am Coll Cardiol 2002; 39: 321A.
4. **Varadarajan P**, Sharma S, Pai RG. Racial paradox in congestive heart failure survival in patients with normal left ventricular ejection fraction. J Am Coll Cardiol 2002; 39: 191A.
5. **Varadarajan P**, Sharma S, Pai RG. Paradoxical Effect of Prognostic Variables in Patients with Congestive Heart Failure and Normal Ejection Fraction. Circulation 2002; 106: II-486.

6. Sharma S, **Varadarajan P**, Pai RG. Natural History of Insignificant Mitral Regurgitation Following Aortic Valve Replacement for Degenerative Aortic Valve Disease. *J Am Coll Cardiol* 2004; 42: 441 A
7. Kapoor N, Varadarajan P, Pai RG. Survival patterns in conservatively treated patients with severe aortic stenosis: prognostic variables in 457 patients. *Circulation* 2004; 110 (17): 2555A
8. **Varadarajan P**, Kapoor N, Pai RG. Aortic valve replacement improves survival in patients with severe aortic stenosis associated with severe pulmonary hypertension. *Circulation* 2004; 110 (17): 2557 A
9. Duvvuri L, **Varadarajan P**, Appel D, Joshi N, Pai RG. Lack of left ventricular dilatation is a marker of increased mortality in patients with chronic severe mitral regurgitation and normal ejection fraction. *Circulation* 2004; 110 (17): 3448 A
10. Joshi N, **Varadarajan P**, Duvvuri L, Appel D, Pai RG. Factors affecting survival in 969 patients with chronic severe mitral regurgitation and left ventricular ejection fraction $\leq 30\%$: role for mitral valve surgery. *Circulation* 2004; 110 (17): 1988 A
11. Pai RG, Kapoor N, **Varadarajan P**, Bansal RC. Malignant natural history of asymptomatic severe aortic stenosis: Beneficial effects of aortic valve replacement, beta blockers and statins. *Circulation* 2005; 112: II-629.
12. **Varadarajan P**, Kapoor N, Bansal RC, Pai RG. Survival in elderly patients with severe aortic stenosis is dramatically improved by aortic valve replacement: Results from a cohort of 277 patients. *Circulation* 2005; 112: II-630
13. **Varadarajan P**, Pai RG. Tricuspid regurgitation in patients with severe mitral regurgitation and normal left ventricular ejection fraction: risk factors and prognostic implications in a cohort of 895 patients. To be presented at ACC 2009
14. **Varadarajan P**, Sharma S, J T Heywood, Pai RG. High Prevalence of Silent Severe Mitral Regurgitation in Patients with Congestive Heart Failure: Its Diagnostic and Management Implications. *Circulation* 2002; 106: II-683.
15. **Varadarajan P**, Sharma S, Pai RG. Identifiable Etiology is Associated with a Better Prognosis in Heart failure Patients with Normal or Near Normal Systolic Function: Results from a Cohort of 1398 Patients *J Am Coll Cardiol* 2002; 39: 421A.
16. Pai RG, **Varadarajan P**. Mechanisms of mitral regurgitation in aortic stenosis: Lack of relationship to aortic stenosis severity and management implications. *J Am Coll Cardiol* 2002; 39: 421A.

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19. Varadarajan P, Pai RG. Gender Differences In Left Ventricular and Hemodynamic Adaptation To Severe Aortic Stenosis: Results From 949 Patients. *JASE* 2004; 17 (5): 548 A
20. **Varadarajan P**, Pai RG. Diastolic Asynchrony as a Marker of Rejection in Children with Orthotopic Heart Transplantation. *JASE* 2004: 17 (5): 532 A
21. **Varadarajan P**, Sharma S, Gandhi S, Umakanthan B, Pai RG. Prognostic Significance of Hemoglobin Level in Congestive Heart Failure Patients With Normal Compared to Reduced Ejection Fraction. *J Card fail* 2004; 10 (4): 352 A
22. **Varadarajan P**, Appel D, Joshi N, Duvvuri L, Pai RG. Protective effect of beta blocker therapy in chronic severe mitral regurgitation patients with normal ejection fraction. (**Featured poster presentation**) *JACC* 2005; 45(3):1058-54
23. **Varadarajan P**, Sharma S, Gandhi S, Umakanthan B, Pai RG. Beneficial effect of beta blockers on survival in congestive heart failure with normal ejection fraction. *JACC* 2005; 45(3):1103-178
24. **Varadarajan P**, Kapoor N, Bansal RC, Pai RG. Gender differences in severe aortic stenosis. *JACC* 2005; 45(3):1131-55
25. **Varadarajan P**, Navarro P, Milani KA, Banafshe P, Motellebi M, Souibri K, Drori R, Tuozo F, Kim HW, Varma R, Zeidler A, Pohost GM. Micro vascular myocardial disease in diabetics by 31P magnetic resonance spectroscopy. *Circulation* 2005; 112(17): A 3418
26. **Varadarajan P**, Pai RG, Nayak KS, Pohost GM. Feasibility Study of Myocardial Perfusion With Adenosine Vasodilator Stress Using 3T CMR. *SCMR* January 2007, Rome
27. Nayak KS, **P Varadarajan**, Liu C-Y, Valencerina S, Pohost GM. CMR at 3 Tesla using a large flexible surface coil: initial experience. *SCMR* 2005
28. Liu C-Y, **Varadarajan P**, Pohost GM, Nayak KS. Studies of Gd-DTPA Relaxivity in different tissue models at 3T. *ISMRM* June 2005
29. Feasibility study of adenosine vasodilator stress MRI using a 3T system. Varadarajan P, Pai RG, Valencerina S, Nayak KS, Pohost GM. *SCMR* Rome, Jan 2007
30. Nathan M, **Varadarajan P**, Heidary S, Pai RG. Association of Bicuspid Aortic Valve With Atrial Septal Aneurysm and Mitral Valve Abnormalities. *ACC* March 2007

31. **Varadarajan P**, Zeidler A, Kim HW, Drori R, Varma R, Beshkov Y, Ocon M, Pohost GM. Microvascular Myocardial Disease in Type 1 Diabetics by ³¹P Magnetic Resonance Spectroscopy. 67th Annual Scientific Sessions of the American Diabetes Association, Chicago 2007.
32. Pai RG, **Varadarajan P**. Severe Aortic Stenosis In Patients With Severe Left Ventricular Dysfunction: Factors Affecting Survival In A Cohort of 194 Patients. *Circulation*
33. **Varadarajan P**, Pai RG. Predictors And Outcomes Of Low Gradient Severe Aortic Stenosis: Results From A Cohort Of 168 Patients. *Circulation* 2007;116:II-446
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35. Dawood R, **Varadarajan P**, Lin T, Rechenmacher S, Neisenburg O, Rasool S, Pai RG. Predictors and prognostic value of ST segment depression during vasodilator stress *J American Coll Cardiol* 2008;51:A380
36. Turk R, **Varadarajan P**, Sampat U, Kamath A, Kandhar S, Pai RG. Survival Benefit Of Aortic Valve Replacement In Patients With Severe Asymptomatic Aortic Regurgitation With Normal Left Ventricular Ejection Fraction *J Am Coll Cardiol* 2008; 51: A274.
37. **Varadarajan P**, Zeidler A, Kim HW, Drori R, Varma R, Beshkov Y, Ocon M, Pohost GM. Microvascular Myocardial Disease in Type 1 Diabetics by 31P Magnetic Resonance Spectroscopy. *JACC*
38. **Varadarajan P, Pai RG**. Risk Factors and Prognostic Implications of Mitral Regurgitation in Severe Aortic Stenosis. *AHA* 2008
39. Varadarajan P, Pai RG. Statins Improve Survival in Patients with Severe Aortic Regurgitation. *AHA* 2008
40. Patel R, Kamath A, **Varadarajan P**, Krishnan S, Pai. RG. Rate and Correlates of Aortic Regurgitation Progression in a Cohort of 4128 Patients with Mild or Mild to Moderate Aortic Regurgitation. *AHA* 2008
41. Lin T, **Varadarajan P**, Rechenmacher S, Rasool S, Niesenberg O, Pohost GM, Pai RG. Survival Patterns in Patients with Coronary Microvascular Dysfunction . *AHA* 2008
42. Kamath A, BA, Turk R, Sampat U, Khandhar S, Varadarajan P, Pai RG, Aortic Valve Replacement Confers Large a Survival Benefit In Severe Aortic Regurgitation Patients With Ejection Fraction <35%: Results From A Cohort of 159 Patients. Presented at *AHA* 2008

43. Sampat U, **Varadarajan P**, Turk R, Patel R, Kamath A, Kandhar S, Pai RG. Survival Benefit with Beta Blocker Therapy in a Cohort of 623 Patients with Severe Aortic Regurgitation: HVSA meeting 2008
44. Turk R, **Varadarajan P**, Sampat U, Kamath A, Kandhar S, Pai RG. Survival Benefit of Aortic Valve Replacement in Patients With Severe Asymptomatic Aortic Regurgitation With Normal Left Ventricular Ejection Fraction HVSA 2008
45. Kamath A, **Varadarajan P**, Turk R, Sampat U, Khandhar S, Pai RG. Aortic Valve Replacement Confers Large a Survival Benefit In Severe Aortic Regurgitation Patients with Ejection Fraction $\leq 35\%$: Results from a Cohort of 159 Patients. Presented at AHA 2008
46. **Varadarajan P**, Pai RG. Frequency, Risk Factors and Prognostic Implications of Tricuspid Regurgitation in Patients with Severe Mitral Regurgitation and Normal Left Ventricular Ejection Fraction: Results from a Cohort of 895 Patients. ACC 2009
47. Lin T, **Varadarajan P**, Rechenmacher S, Rasool S, Neisenberg O, Pohost GM, **Pai RG**. Survival Patterns in Patients with Coronary Microvascular Dysfunction. *Circulation*. 2008;118:S_1085-S_1086
48. Patel R, **Varadarajan P**, Turk R, Kamath A, **Pai RG**. Impact of Etiology On Survival In Patients With Severe Aortic Regurgitation: Results From A Cohort Of 786 Patients. *Circulation* 2009.
49. Pai RG, **Varadarajan P**. Prognostic Implications of Mitral Regurgitation in Patients With Severe Aortic Regurgitation. *Circulation* 2009.
50. Pai RG, **Varadarajan P**. Factors Leading To Nonsurgical Management In Severe Aortic Regurgitation Patients With ACC/AHA Class I Indication For Aortic Valve Replacement. *Circulation* 2009.
51. T Shin, **P Varadarajan**, RG Pai, GM Pohost, KS Nayak. "Systolic 3D First-Pass Myocardial Perfusion MRI," Proc. ISMRM 17th Scientific Sessions, Honolulu, Apr 2009, p. 1771.
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53. **Varadarajan P**, Pai RG. Rapid, Routine Evaluation Of Left Ventricular Diastolic Function And Left Ventricular Filling Pressures During Cardiac Magnetic Resonance Imaging. JCMR 2010
54. Pai RG, **Varadarajan P**, Lin T. Selection Of Stress Modality As A Strong Marker Of Prognosis In 12,770 Patients With Suspected Coronary Artery Disease. JACC 2010
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56. **Varadarajan P**, Pai RG. Tricuspid Regurgitation In Patients With Severe Aortic Stenosis: Frequency, Risk Factors and Prognostic Implications In A Cohort of 740 Patients. JACC 2010.
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58. Haq T, **Varadarajan P**, Pai RG. Statin Use Is Associated With Better Survival in Patients with Positive Stress Tests With Negative Coronary Angiograms: Potential Beneficial Effects In Coronary Microvascular Disease. Circulation 2010.
59. **Varadarajan P**, Pai RG. Stress Induced Chest Pain Is Associated With A Better Survival In Patients With Suspected Coronary Artery Disease. Circulation 2010.
60. **Varadarajan P**, Pai RG. Tricuspid Regurgitation Adversely Impact Survival In Severe Aortic Regurgitation Patients: Results From a Cohort Of 756 Patients And Implications For Surgical Management. Circulation 2010
61. Zungho Zun, **Padmini Varadarajan**, Ramdas G Pai, Eric C Wong, Krishna S Nayak. Arterial spin labeled MRI detects clinically relevant increases in myocardial blood flow with vasodilatation. J Cardiovasc Magn Reson. 2011; 13(Suppl 1): O94. Published online 2011 February 2. doi: 10.1186/1532-429X-13-S1-O94
62. Zungho Zun, Terrence Jao, Ning Smith, **Padmini Varadarajan**, Ramdas G Pai, Eric C Wong, Krishna S Nayak. Myocardial ASL perfusion reserve test detects ischemic segments in initial cohort of 10 patients with angiographic CAD. J Cardiovasc Magn Reson. 2011; 13(Suppl 1): P110. Published online 2011 February 2. doi: 10.1186/1532-429X-13-S1-P110
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64. Aftab W, Rasool S, **Varadarajan P**, Pai RG. Predictors of perioperative MACE in patients undergoing renal transplant. Circulation 2011; 2011; 124: A16874.
65. Aftab W, Rasool S, **Varadarajan P**, Pai RG. Protective effects of beta blockers and ACE inhibitors in patients with endstage renal disease. Circulation 2011; 2011; 124: A16783
67. Tiwari U, **Varadarajan P**, Pai RG. High Frequency Of Unrecognized High Filling Pressures In 1408 Patients With Atrial Fibrillation and Normal Left Ventricular Ejection Fraction: Its Clinical Implications. JACC 2012; 59: A151.
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69. Aftab W, **Varadarajan P**, Rasool S, Gazallo J, Motabar A, Ali, Kore A, DeVera M, Pai RG. Volume Excess Causing Heart Failure With Normal Ejection Fraction Is A Strong Predictor Of Mortality In Patients With End Stage Renal Disease. JACC 2012; 59: A464.
70. Aftab W, **Varadarajan P**, Gazallo J, Motabar A, Kore A, DeVera M, Pai RG. High Prevalence And Clinical Significance Of Hypertensive Response To Dobutamine Stress In End Stage Renal Disease Patients Undergoing Evaluation For Renal Transplantation. JACC 2012; 59: A314.
70. Aftab W, Gazallo J, Motabar A, Rasool S, **Varadraján P**, Pai RG. Statin Therapy In Hemodialysis Patients Improves Survival. Circulation 2012
71. Motabar A, Aftab W, Gazallo J, Rasool S, **Varadraján P**, Pai RG. High Left Atrial Volume Impairs Survival In End Stage Renal Disease: Results From A Prospective Cohort Of 575 Patients. Circulation 2012
72. **Varadraján P**, Rasool S, Aftab W, Pai RG. Reduced Longitudinal And Circumferential Strains With Radial Compensation In Endstage Renal Disease Patients Despite Normal Ejection Fraction. Circulation 2012
73. Gazallo P, Aftab W, **Varadarajan P**, Motabar A, Pai RG. Impact Of Dedicated Cardiology Clinic On Mortality Reduction In Patients With End Stage Renal Disease: Results From A Prospective Cohort of 575 Patients. JACC 2013.
74. Aftab W, **Varadarajan P**, Gazallo J, Pai RG. Impact of isolated left atrial hypertension on survival in patients with ESRD. JACC 2013
75. Aftab W, Motabar A, Gazallo J, **Varadraján P**, Pai RG. Prognostic implications of various measures of right atrial pressure in patients with ESRD. Circulation 2013
76. Tyagi G, Desai A, Butrous H, **Varadarajan P**, Pai RG. Improved long term survival with beta blocjers after aortic valve replacement: Results from a cohort of 570 patients. J Am Coll Cardiol:2014: April 14, Vol 63: 1158-345
77. Pai RG, Pohost G, **Varadarajan P**, Lerakis S, Raman S, Golba K, Higgins R, Chua YL, White H, Gullestad L, Oh J, Sopko G, Rouleau J, Stebbins A, Al-Khalidi H. Prognostic value of baseline cardiovascular magnetic resonance imaging measures of left ventricular geometry and function in 366 patients undergoing surgery for ischemic cardiomyopathy:Results from NIH sponsored STICH trial. J Am Coll Cardiol:2014: April 14, Vol 63: 1175-51
78. Piña IL, Zheng Q, She L, Szwed H, Lang IM, Farsky PS, Castelvechchio S, Biernat J, Paraforos A, Kosevic D, Favaloro LE, Nicolau JC, Varadarajan P, Velazquez EJ, Pai RG, Cyrille N, Lee KL, Desvigne-Nickens P; STICH Trial Investigators. Sex Difference in Patients With Ischemic Heart

Failure Undergoing Surgical Revascularization: Results From the STICH Trial (Surgical Treatment for Ischemic Heart Failure). *Circulation*. 2018 Feb 20;137(8):771-780.

Books authored:

1. Echocardiography Board Review. Edited by Ramdas G Pai and **Padmini Varadarajan**. Published by John Wiley and Sons, UK, 2008
2. One hundred questions about valvular heart disease. Edited by Ramdas G.Pai and **Padmini Varadarajan**. Published by Jones and Bartlett, USA, 2008
3. Echocardiography: A Case based approach. Au: Pai RG, Chandraratna PAN, Malik S, **Varadarajan P**. Jones & Bartlett, Boston, USA 2010
4. Echocardiography Board Review. Edited by Ramdas G Pai and **Padmini Varadarajan**. Published by John Wiley and Sons, UK, 2013 (Second Edition)
5. Cardiology Board Review. Au **Pai RG**, Varadarajan P, Pai SM. Wiley, London UK 2018
6. Cardiac MRI Board Review. Au Varadarajan P, Pai RG. Jaypee Publishing, New Delhi (In preparation)

Book Chapters:

1. **Varadarajan P**, Souibri K, Nayak KS, Pohost GM. Cardiac CT, PET MRI.(Dilsizian and Pohost [editors]Blackwell Publishers, Oxford, UK, 2006
2. **Varadarajan P**, Nayak K, Kim H, Pai RG, Pohost GM. Cardiovascular magnetic resonance: Evaluation of myocardial function, perfusion and viability. In Text book of Cardiac MR, CT and PET. Ed Dilsizian, Pohost. Blackwell Publishers, Oxford, UK, 2010
3. Pai RG, **Varadarajan P**. Left ventricular diastolic function and filling pressures. Echocardiography: A case based approach. Editors Pai RG, Chandraratna PAN, Malik S, Varadarajan P. Jones & Bartlett, Boston, USA January 2012. NLM ID: 101562697.
4. Pai RG, **Varadarajan P**. Nonvalvular Hemodynamics. Echocardiography: A case based approach. Editors Pai RG, Chandraratna PAN, Malik S, Varadarajan P. Jones & Bartlett, Boston, USA January 2012. NLM ID: 101562697.
5. **Varadarajan P**, Pai RG. Stress Echocardiography. Echocardiography: A case based approach. Editors Pai RG, Chandraratna PAN, Malik S, Varadarajan P. Jones & Bartlett, Boston, USA January 2012. NLM ID: 101562697.

6. **Varadarajan P**, Pai RG. Mitral Stenosis. Echocardiography: A case based approach. Editors Pai RG, Chandraratna PAN, Malik S, Varadarajan P. Jones & Bartlett, Boston, USA January 2012. NLM ID: 101562697.
7. **Varadarajan P**, Pai RG. Mitral regurgitation. Echocardiography: A case based approach. Editors Pai RG, Chandraratna PAN, Malik S, Varadarajan P. Jones & Bartlett, Boston, USA January 2012. NLM ID: 101562697.
8. Gopal A, Sheth C, **Varadarajan P**, Pai RG. Aortic stenosis. Echocardiography: A case based approach. Editors Pai RG, Chandraratna PAN, Malik S, Varadarajan P. Jones & Bartlett, Boston, USA January 2012. NLM ID: 101562697.
9. **Varadarajan P**, Pai RG. Restrictive cardiomyopathy. Echocardiography: A case based approach. Editors Pai RG, Chandraratna PAN, Malik S, Varadarajan P. Jones & Bartlett, Boston, USA January 2012. NLM ID: 101562697.
10. **Varadarajan P**, Pai RG. Infiltrative and Miscellaneous myocardial disorders. Echocardiography: A case based approach. Editors Pai RG, Chandraratna PAN, Malik S, Varadarajan P. Jones & Bartlett, Boston, USA January 2012. NLM ID: 101562697.
11. **Varadarajan P**, Pai RG. Heart transplant. Echocardiography: A case based approach. Editors Pai RG, Chandraratna PAN, Malik S, Varadarajan P. Jones & Bartlett, Boston, USA January 2012. NLM ID: 101562697.
12. **Varadarajan P**, Pai RG. Diseases of the aorta. Echocardiography: A case based approach. Editors Pai RG, Chandraratna PAN, Malik S, Varadarajan P. Jones & Bartlett, Boston, USA January 2012. NLM ID: 101562697.
13. **Varadarajan P**, Pai RG. Pulmonary hypertension. Echocardiography: A case based approach. Editors Pai RG, Chandraratna PAN, Malik S, Varadarajan P. Jones & Bartlett, Boston, USA January 2012. NLM ID: 101562697.
14. Pai RG, **Varadarajan P**. Coarctation of Aorta. Echocardiography: A case based approach. Editors Pai RG, Chandraratna PAN, Malik S, Varadarajan P. Jones & Bartlett, Boston, USA January 2012. NLM ID: 101562697.
15. **Varadarajan P**, Pai RG. Congenitally Corrected transposition of great arteries. Echocardiography: A case based approach. Editors Pai RG, Chandraratna PAN, Malik S, Varadarajan P. Jones & Bartlett, Boston, USA January 2012. NLM ID: 101562697.
16. **Varadarajan P**, Pai RG. Surgically corrected transposition of great arteries. Echocardiography: A case based approach. Editors Pai RG, Chandraratna PAN, Malik S, Varadarajan P. Jones & Bartlett, Boston, USA January 2012. NLM ID: 101562697.

17. **Varadarajan P**, Pai RG. Ebstein's Anomaly. Echocardiography: A case based approach. Editors Pai RG, Chandraratna PAN, Malik S, Varadarajan P. Jones & Bartlett, Boston, USA January 2012. NLM ID: 101562697.
18. **Varadarajan P**, Pai RG. Tetralogy of Fallot. Echocardiography: A case based approach. Editors Pai RG, Chandraratna PAN, Malik S, Varadarajan P. Jones & Bartlett, Boston, USA January 2012. NLM ID: 101562697.
19. **Varadarajan P**, Pai RG. Miscellaneous congenital lesions. Echocardiography: A case based approach. Editors Pai RG, Chandraratna PAN, Malik S, Varadarajan P. Jones & Bartlett, Boston, USA January 2012. NLM ID: 101562697.
20. Amiri H, **Varadarajan P**, Pai RG. Echocardiographic evaluation of pulmonary valve. Text Book of Echocardiography. Ed. N. Nanda Jaypee Brothers Medical Publishers (P) Ltd, 2013
21. Hari P, Pai RG, **Varadarajan P**. Echocardiographic evaluation of mitral stenosis. Text Book of Echocardiography. Ed. N. Nanda, Jaypee Brothers Medical Publishers (P) Ltd, 2013

Invited Speaker or moderator at National / International Meetings:

1. Special invited Speaker: CAD in Women. Topic: CMR in Women, 59th Annual Scientific Sessions of American College of Cardiology at Atlanta, Ga in March 14-16, 2010. I was invited to speak at this session due to my expertise in cardiac MRI and its application in women with heart disease (20,000 attendees from all over the world)
2. Session moderator at the 61st, Annual Scientific Sessions of American College of Cardiology at Chicago, IL in March 24-27, 2012 (18,000 Cardiologists from all over the world attended the meeting)
3. Special invited speaker: Bicuspid aortic valve in athletes. 65th Annual Scientific Sessions of American College of Cardiology at Chicago, Illinois, April 2-4th, 2016. I was invited to speak at this special forum of the ACC due to my expertise in valvular heart diseases (19,000 Cardiologists attended)
4. Special invited speaker: Aortic root disease in athletes. 67th Annual scientific sessions of American College of Cardiology at Orlando, FL, March 10-12, 2018.
5. Invited Speaker at Pre-ACC Echo Symposium: 53rd Annual Scientific Session of the American College of Cardiology, March 7-10, 2004 at New Orleans, Louisiana: presented an interesting case, attended by 400 Physicians

6. Invited Speaker at Pre-ACC Echo Symposium: 56th Annual Scientific Session of the American College of Cardiology, March 24-27, 2007 at New Orleans. Louisiana: Discussed an interesting cardiac case, attended by 350 Physicians
7. Invited Speaker at Pre-ACC Echo Symposium: 57th Annual Scientific Session of the American College of Cardiology, March 29-April 1 2008 at Chicago, IL: Discussed an interesting cardiac case, attended by 300 Physicians
8. Invited Speaker at Pre-ACC Echo Symposium: 58th Annual Scientific Session of the American College of Cardiology, March 29-31, 2009 at Orlando, FL: Discussed an interesting cardiac case with imaging focus, attended by 325 Physicians
9. Invited Speaker at Pre-ACC Echo Symposium: 59th Annual Scientific Session of the American College of Cardiology, March 14-16, 2010 at Atlanta, Georgia: Discussed an interesting cardiac case with a clinical focus, attended by 300 Physicians
10. Invited Speaker at Pre-ACC Echo Symposium: 60th Annual Scientific Session of the American College of Cardiology, April 2-5, 2011 at New Orleans, Louisiana: Discussed an interesting cardiac case, attended by 275 Physicians
11. Invited Speaker at Pre-ACC Echo Symposium: 62nd Annual Scientific Session of the American College of Cardiology, March 9-11, 2013 at San Francisco, CA: Discussed an interesting cardiac case, attended by 350 Physicians
12. Invited Speaker at Pre-ACC Echo Symposium: 63rd Annual Scientific Session of the American College of Cardiology, March 29-31, 2014 at Washington D.C: Discussed an interesting cardiac case, attended by 250 Physicians
13. Invited Speaker at Pre-ACC Echo Symposium: 64th Annual Scientific Session of the American College of Cardiology, March 14-16, 2015 at San Diego, CA: Discussed an interesting cardiac case, attended by 310 Physicians
14. Invited Speaker at Pre-ACC Echo Symposium: 65th Annual Scientific Session of the American College of Cardiology, April 2-4, 2016 at Chicago, IL: Discussed an interesting cardiac case, attended by 275 Physicians
15. Invited Speaker at Pre-ACC Echo Symposium: 66th Annual Scientific Session of the American College of Cardiology, March 17-19, 2017 at Washington D.C: Discussed an interesting cardiac case, attended by 250 Physicians
16. Invited Speaker at Pre-ACC Echo Symposium: 67th Annual Scientific Session of the American College of Cardiology, March 10-12, 2018 at Orlando,FL: Discussed an interesting cardiac case, attended by 300 Physicians

17. Invited Speaker at Pre-AHA Echo Symposium: Annual Scientific Session of the American Heart Association, Nov 4-7, 2007 at Orlando, FL (attended by 19,000 Cardiologists)
18. Invited Speaker at Pre-AHA Echo Symposium: Annual Scientific Session of the American Heart Association, Nov 4-8, 2008 at New Orleans, Louisiana
19. Invited Speaker at Pre-AHA Echo Symposium: Annual Scientific Session of the American Heart Association, Nov 14-18, 2009 at Orlando, FL
20. Invited Speaker at Pre-AHA Echo Symposium: Annual Scientific Session of the American Heart Association, Nov 13-17, 2010 at Chicago, IL
21. Invited Speaker at Pre-AHA Echo Symposium: Annual Scientific Session of the American Heart Association, Nov 12-16, 2011, at Orlando, FL
22. Invited Speaker at Pre-AHA Echo Symposium: Annual Scientific Session of the American Heart Association, Nov 16-20, 2013 at Dallas, TX
23. Invited Speaker at Pre-AHA Echo Symposium: Annual Scientific Session of the American Heart Association, Nov 15-19, 2014 at Chicago, IL
24. Invitation to be Guest Editor for Adult Congenital Heart Disease, Echocardiography
25. Invited speaker, XXIII World Congress of Clinical Cardiology, Echocardiography and Allied Imaging Techniques, Jaipur, India October 5-8, 2017 (was unable to attend due to scheduling conflicts)
26. Invited speaker World Congress on Interventional Cardiology and Cardiac Surgery at Montreal, Canada, May 16-17, 2018 (was unable to attend due to scheduling conflicts)
27. Invited speaker at XXIV World Congress of Echo- May 17-20, 2018 at the Albena Resort on the Black Sea, near Varna in Bulgaria. (was unable to attend due to scheduling conflicts)
28. Invitation to be a speaker at Eurocardiology 2018, October 22-24, 2018 at Rome, Italy (was unable to attend due to scheduling conflicts)

Guest editor:

I was invited to guest edit “Imaging of Adult Congenital Heart Disease” for 2019 supplement for Journal, Echocardiography. I planned the supplement, invited experts in the field to contribute, arranged peer review and approved the final draft for publication. The papers are listed below:

1. Chugh R: Echocardiographic evaluation of patent ductus arteriosus
2. Chugh R: Pregnancy and adult congenital heart disease
3. Ahmed K, Varadarajan P (corresponding author): Evaluation of transposition of great arteries
4. Ahmed K, Varadarajan P (corresponding author): Atrial septal defect and patent foramen ovale

5. Vaikom M et al: Interventions in structural heart disease
6. Kanakriyah M, Nayak S, Varadarajan P (Corresponding author): Evaluation of AV canal defects
7. Kanakriyah M, Nayak S, Varadarajan P (Corresponding author): Evaluation of ventricular septal defects
8. Buber Y et al: Evaluation of left ventricular outflow tract obstruction

Books reviewed:

1. Manual of Perioperative Care in Adult Cardiac Surgery, 5th Edition. Wiley Nov 2018

Editorial Board Membership:

2005-07: Journal Cardiovascular MR – Assistant Editor

2013 – present: Echocardiography- Editorial consultant

Editorial Consultant for peer review:

J Computer Assisted Tomography

Echocardiography

International Journal of Cardiology

Journal Biocybernetics and Biomedical Engineering

Grants awarded:

2003-2006: Co-investigator, STICH CMR Core Laboratory HL 07268305 (NHLBI), PI, Gerald M Pohost, MD, Direct cost \$500,000

2003-2006: Co-investigator, Prediction of cardiomyopathy in type 1 diabetics using 31 Phosphorus MRS HL073412-05 (NHLBI), PI, Gerald M. Pohost, MD. Direct cost \$250,000

2003-2006: Co-Investigator: DOE grant on Robotics (PI: Gerald M. Pohost). Total award \$1,000,000

2008-2013: Principal investigator: Equipment and software grant from General Electric for investigation of novel cardiac MRI sequences. Estimated value \$400,000

- 2010-2013: Co-investigator: Stress Myocardial perfusion with ASL in ESRD. Coulter Foundation, PI: Nayak KS. Award \$600,000.
- 2015-2016: Co-investigator: Adventist Heart Study – Diet and preclinical heart failure. GRASP award from Loma Linda University for \$60,000

Grant not awarded:

- 2006: NHLBI (RO1). Co-PI. Women's Ischemia Syndrome Evaluation (WISE). PI. Gerald M Pohost. Direct costs \$500,000
- 2016: NHLBI (RO1). Co-Investigator. Associating diet with Heart Failure genesis, progression and mechanisms. PIs: Synnove F. Knutsen MD, PhD and Ramdas G. Pai MD. Direct Costs requested: \$8,883,469. Reviewed and scored, but not funded. Being prepared for resubmission.

Service to Loma Linda University and Medical Center:

- 2006 - present: Key faculty of cardiovascular fellowship training program
- 2006 - present: Director, Cardiovascular MRI
- 2008 - 13: Associate director, Heart & Imaging Center
- 2018 - present: Chair, Cardiovascular research

Service to national professional societies:

2019 - present: Diversity and Inclusion Committee of American College of Cardiology: This committee has been formed with an aim to increase diversity in Medicine and especially in Cardiovascular Medicine. I sit on the committee to help target high school students and attract a diverse population to the medical field. To this end I have set up a pilot project to get high school students to be involved in Research at Loma Linda University Medical Center. It will be very exciting to bring this project which is very dear to

my heart to UCR School of Medicine. The other arm of this committee focuses on getting medical students, interns, and residents of diverse groups into Cardiology.

2019 - present: Section Engagement for ACC Imaging section website (ACC.org): I was selected as a Section Engagement Content Author for the CV Imaging Section webpage on ACC.org based on my expertise in Cardiac imaging and research. For the next year I will write and submit articles concerning section engagement for posting on the CV Imaging Section webpage and to be shared with all CV Imaging Section members.