## **CURRICULUM VITAE**

## AIDAN A. RANEY, JR., MD, FACS, FACC

## A. PERSONAL INFORMATION

(Past) James and Pamela Muzzy Endowed Chair Hoag Heart & Vascular Institute Newport Beach, CA

(Past) Medical Director, Cardiovascular Surgery Surgical Director, Heart Valve Center Jeffrey M. Carlton Heart and Vascular Institute Hoag Memorial Hospital Presbyterian Newport Beach, CA

Member of the Hospital Foundation Board of Directors Hoag Memorial Hospital Presbyterian Newport Beach, CA

Member of OCTANE (Orange County based Tech and MedTech) Board of Directors

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# B. EDUCATION

Medical School	University of Southern California, School of Medicine, Los Angeles, CA. Medical Degree – 1973
<u>Surgical</u> <u>Residency</u> :	
General Surgery	Stanford University Medical Center, Stanford, CA. – 1973-1981
Cardiovascular and Thoracic Surgery	Stanford University Medical Center, Stanford, CA. – 1973-1981
Cardiovascular Surgery Research	Stanford University Medical Center, Stanford, CA. – 1977
Honors Licensure	Alpha Omega Alpha - Honor Society California, 1974

Certification Board Certified American Board of Surgery Board Certified American Board of Thoracic Surgery, (#4044)

## C. PROFESSIONAL BACKGROUND

#### **Specific Administrative Responsibilities**

(Past) Medical Director, Cardiovascular Surgery 1987-2018 Jeffrey M. Carlton Heart & Vascular Institute, Hoag Hospital Newport Beach, California

(Past) Surgical Director, Heart Valve Center 2006-2018 Hoag Memorial Hospital, Presbyterian Newport Beach, CA

Served on Hoag Hospital Board of Directors Served on Hoag Hospital Medical Executive Committee

#### Achievements at Hoag Heart and Vascular Institute 1987-2017:

Joined Hoag Memorial Hospital with Dr. Douglas Zusman to revitalize Cardiac Surgery Program; developed Cardiac Transplantation Program and Clinical Pathways; supported initiation of computer charting; tripled CV pump cases within 6 years; added Thoracoscopic Lung Surgery and then Robotic Lung Surgery within 7 years; introduced Minimally Invasive Cardiac Surgery within 10 years; achieved 400 pump procedures (quadrupling the hospital's numbers in 10 years); received 5 Star Distinction from Healthgrades; received Top Levels of Distinction from Society of Thoracic Surgeons (STS); built Mitral Valve Repair program; championed for Hoag's acquisition of first Intuitive Robot and performed first Robotic Mitral Valve Repair; instrumental in development of Hybrid Suite for TAVR Program.

Hired first Physician Assistant at Hoag; recruited Cardiovascular Surgeon Dr. Colin Joyo; recruited World Renowned Echocardiographer Dr. Pravin M. Shah, and opened Hoag's Heart Valve Center; recruited Hoag's first Endovascular Surgeon Dr. Jacques Kpodonu; recruited Stanford CV Surgeon Dr. Anthony Caffarelli; recruited first fully dedicated Thoracic Surgeon Dr. Daryl Pearlstein; recruited Cardiovascular Surgeon Dr. Asad Shah.

#### D. SOCIETY MEMBERSHIPS

#### Local

California Medical Association Orange County Medical Association Western Thoracic Surgical Association Hoag Memorial Hospital's Board of Directors Executive Committee

#### National

American College of Surgeons Fellow, American College of Cardiology Fellow, American College of Chest Physicians Fellow, American College of Surgeons Society of Thoracic Surgeons Society of Heart Valve Disease Society of Robotic Surgery

## International

International College of Surgery International Society for Minimally Invasive Cardiothoracic Surgery International Heart Transplant Society Founding Member, International Society of Cardio-Thoracic Surgeons (Japan)

## E. AWARDS

American Heart Association – Achievement in Cardiovascular Science and Medicine, May 14, 2011

James & Pamela Muzzy Endowed Chair in Cardiovascular Surgery, 2011 to Present

2013 Recipient Best Doctors Honor, Orange County Register, OC Register Magazine

## F. PUBLICATIONS

- 1. Oyer PE, Stinsen EB, Bieber CP, Reitz BA, **Raney AA**, Baumgartner WA, Shumway NE. Diagnosis and Treatment of Acute Cardiac Allograft Rejection. Transplant Proc. 1979 Mar;11(1);296-303.
- Bowden, RE, Bristow Mr, Watson D, Gordon, J, Sageman S, Raney AA, Jackson G, Jamieson S, Stinson E, Harrison, DC. Prostaglandins and Histamines in Cardiac Transplant Rejection. Clinical Res 27:155A, 1979.
- 3. Watson DC, Reitz BA, Baumgartner WA, **Raney AA**, Oyer PE, Stinson EB, Shumway NE. Distant Heart Procurement for Transplantation. Surgery, 1979 Jul;86(1):56-9
- Rossiter SJ, Miller DC, Raney AA, Oyer PE, Reitz BA, Stinson EB, Shumway NE. Hepatitis Risk in Cardiac Surgery Patients Receiving Factor IX Concentrates. J Thorac Cardiovasc Surg. 1979 Aug;78(2):203:7
- 5. Bieber CP, Jamieson S, **Raney AA**, Burton N, Bogarty S, Hoppe R, Kaplan HS, Strober S, Stinson EB. Cardiac Allograft Survival in Rhesus Primates Treated with Combined Total Lymphoid Irradiation and Rabbit Antithymocyte Globulin. Transplantation. 1979 Oct;28(4):347-50.Billingham ME, Baumgartner WA.
- 6. Bieber CP, Jamieson S, **Raney AA**, Burton N, Bogarty S, Hoppe R, Kaplan HS, Strober S, Stinson EB. Cardiac Allograft Survival in Rhesus Primates Treated with Total Lymphoid Irradiation and Rabbit Antithymocyte Globulin. Surgery Forum 1979;30:285-6.
- 7. **Raney AA**, Stinson EB, Shumway EB. Cardiac Transplantation. Hurst JW. Update III, The Heart. New York. McGraw Hill, 1980 9-21.
- 8. Watson DC, Reitz BA, Masek MA, **Raney AA**, Oyer PE, Stinson EB, Shumway NE. Distant Heart Procurement for Human Transplantation. Departments of Pathology and Cardiovascular Surgery, Ultrastructural studies. Circulation. 1980 Aug;62(2 Pt 2):111-9.
- 9. Billingham ME, Baumgartner WA, Watson DC, Reitz BA, Masek MA, **Raney AA**, Oyer PE, Stinson EB, Shumway NE. Distant Heart Procurement for Human Transplantation. Ultrasound Studies. Circulation 62 (Suppl I)11,1980.

- 10. Pennock JL, Reitz BA, Bieber CP, Jamieson SW, **Raney AA**, Oyer PE, Stinson EB. Cardiac Allograft Survival in Cynomolgus Monkeys Treated with Cyclosporin-A in Combination with Conventional Immune Suppression. Transplantation Proc. 1981 Mar;13 (1 Pt 1):390-2.
- 11. Reitz BA, Bieber CP, **Raney AA**, Pennock JL, Jamieson SW, Oyer PE, Stinson EB. Orthotopic Heart and Combined Heart and Lung Transplantation with Cyclosporin-A Immune Suppression. Transplantation Proc. 1981 Mar;13(1 Pt 1):393-6.
- 12. **Raney AA**, Stinson EB, Shumway NE. The Technique of Cardiac Transplantation. Hurst JW. The Heart. New York. McGraw Hill, 1981;108, 1922-1927.
- 13. **Raney AA**, Stinson EB, Oyer PE, Shumway NE. Cardiac Transplantation for End-Stage Ischemic Heart Disease. Department of Cardiovascular Surgery, Stanford University Medical Center, Stanford, CA.
- 14. Griffith LD, **Raney AA**, Dembitsky WP, Hartley-Winkler MH, Daily PO. Takayasu's Arteriopathy with Associated Descending Thoracic Aortic Dissection During Pregnancy: A Multi-Disciplinary Approach Leading to a Successful Outcome. Manuscript submitted for publication in Angiology, April 1986.
- 15. Macoviak JA, Stinson EB, Starkey TD, Hansen DE, Cahill PD, Miller DC, Shumway NE, **Raney, AA**. Myoventriculoplasty and Neoventricle Myograft Cardiac Augmentation to Establish Pulmonary Blood Flow. J Thorac Cardiovasc Surg. 1987 Feb;93(2):212-20.
- 16. Pennock JL, Reitz BA, Bieber CP, Jamieson SW, Burton NA, **Raney AA**, Oyer PE, Stinson EB. Lethal Complications Arising from Cyclosporin-A Immune Suppression with Combination Drug Therapy in Monkey Heart and Combined Heart and Lung Transplantation. Department of Cardiovascular Surgery, Stanford University Medical Center, Stanford, CA.
- 17. Silverman JF. Coronary Angiography: An Introduction to Interpretation and Technique. Ann of Thor Surg. Addison-Wesley. Book Review.
- 18. Rohrer CH, Hartley-Winkler M, Griffith LD, Daily PO, Dembitsky WP, **Raney AA**. Calcium Heparin vs Beef Lung Heparin. Manuscript submitted for publication.
- 19. **Raney AA**, Zusman DR, Dembitsky WP, Daily PO. Expansion of Heart Transplantation to a New Geographic Region. J Heart Transplant 1986;5:81-3.
- 20. Dembitsky WP, Daily PO, **Raney AA**, Moores WY, Joyo CI. Temporary Extracorporeal Support of the Right Ventricle. J Thorac Cardiovasc Surg. 1996 Apr;91 (4):518-25
- 21. Shah PM, **Raney AA**, Duran CM, Oury JH. Multiplane Transesophageal Echocardiography: A Roadmap for Mitral Valve Repair. J Heart Valve Dis. 1999 Nov; 8(6):625-9.
- 22. Shah PM, Duran CM, **Raney AA**. Echocardiography in the Operating Room. Cardiac Ultrasound Today. 1999;5(6,7):95-132.
- 23. Shah PM, **Raney AA**: Determinants of Systolic Anterior Motion (SAM) Following Mitral Valve Repair (MVR), World Symposium on Heart Valve Disease, London, England, June 11 14, 1999.
- 24. Shah PM, **Raney AA**: Mechanism of Systolic Anterior Motion (SAM) of the Mitral Valve Complicating Mitral Valve Repair and Potential Approaches for its Prevention. Association of University Cardiologists, Carmel, CA, January 13 14, 2000.

- 25. Shah PM, **Raney AA**: Post Mitral Repair Systolic Anterior Motion (SAM) is Causally Related More to Height of the Anterior Mitral Leaflet (AML) than of the Posterior Leaflet (PML), American College of Cardiology Scientific Session, Anaheim, CA, March 12 15, 2000.
- 26. Shah PM, **Raney AA**: Systolic Anterior Motion Following Mitral Valve Repair: A Major Role of Anterior Mitral Leaflet? American College of Cardiology Scientific Session, Orlando, FL, March 18 21, 2001.
- 27. **Raney AA**, Shah PM, Joyo CI: The "Pomeroy Procedure": A New Method to Correct Post-Mitral Valve Repair Systolic Anterior Motion. J Heart Valve Dis. 2001 May;10(3):307-11.
- 28. Shah PM, **Raney AA**: Echocardiographic Correlates of Left Ventricular Outflow Obstruction and Systolic Anterior Motion Following Mitral Valve Repair. J Heart Valve Dis. 2001 May; 10(3)302-6.
- 29. Matsukida K, Shah PM, **Raney AA**: Echocardiographic Assessment of Leaflets and Annular Dimension Changes in Myxomatous Mitral Valve Disease. The Society for Heart Valve Disease, First Biennial Meeting, London, England, June 15-18, 2001.
- 30. **Raney AA**, Shah PM: A New Surgical Technique in Mitral Valve Repair (Pomeroy Procedure). The Society for Heart Valve Disease, First Biennial Meeting, London, England, June 15-18, 2001.
- 31. Matsukida K, Shah PM, **Raney AA**: Anatomic Determinants of Systolic Anterior Motion Following Mitral Valve Repair. XIVth World Congress of Cardiology, Sydney, Australia, May 5-9, 2002.
- 32. **Raney AA**, Shah PM, Matsukida K: Anterior Mitral Leaflet Reduction, A New Surgical Approach to Manage Systolic Anterior Motion Following Mitral Valve Repair. XIVth World Congress of Cardiology, Sydney, Australia, May 5-9, 2002.
- 33. Shah PM, **Raney AA**. Echocardiographic Roadmap of the Mitral Valve Anatomy. Journal of Heart Valve Disease 2003 September; 12(5):551-2.
- 34. Matsunaga A, Shah PM, **Raney AA.** Impact of Intraoperative Echocardiography/Surgery Team on Successful Mitral Valve Repair: A Community Hospital Experience. Journal of Heart Valve Disease 2005 May; 14(3):325-30; discussion 330-1.
- 35. Shah PM; **Raney, AA**. Mitral Valve Repair in the Elderly: The Role of the Echocardiography / Surgery Team in Patient Outcome. The American Journal of Geriatric Cardiology. 2006 October Vol. 15 No. 5
- 36. Shah PM, Raney AA. Tricuspid valve disease. Curr Probl Cardiol. 2008 Feb; 33(2):47-84.
- 37. Kpodonu J, **Raney AA.** The Cardiovascular Hybrid Room: A Key Component for Hybrid Interventions and Image Guided Surgery in the Emerging Specialty of Cardiovascular Hybrid Surgery. Interact Cardiovasc Thorac Surg. 2009 Oct;9(4):688-92. Epub 2009 Jul 21.
- Kpodonu J, Raney AA. Access Platform Techniques for Transcatheter Aortic Valve Replacement. J Card Surg. 2010 Jul;25(4):373-80. Epub 2010 May 18
- 39. Kpodonu J. (2010). Foreward. **Raney, AA**. Manual of Thoracic Endoaortic Surgery (p. v-vi). London: Springer
- 40. Shah PM, **Raney AA**, Echocardiography in Mitral Regurgitation with Relevance to Valve Surgery. Journal of the American Society of Echocardiography 2011 October Vol. 24 No. 10
- 41. Shah PM, **Raney AA**. New Echo Based Classification of Mitral Valve Pathology: Relevance to Surgical Valve Repair. J Heart Valve Disease 2012;21:37-40

# F. PRESENTATIONS

- 1. "Case Presentations: Patient with mitral regurgitation; Feasibility of valve repair?," presented at Newer Medical and Surgical Options in Valvular Heart Disease symposium, The Clubhouse at Pelican Hill Golf Club, Newport Beach, California, April 22, 1999.
- "Case Presentations: Patient with aortic valve disease; Suitability for Ross Operation?," presented at Newer Medical and Surgical Options in Valvular Heart Disease symposium, The Clubhouse at Pelican Hill Golf Club, Newport Beach, California, April 22, 1999.
- 3. "Heart and Lung Surgery: Program Statistics, Results, Surgical Innovation, Thoracic Surgery Lung Cancer, Accomplishments," presented at Grand Rounds, Hoag Hospital, May 5, 1999.
- 4. "MIDCAB Surgery: Advantages, Indications and Current Role?" presented at Acute Coronary Syndromes: An Update on Unstable Angina and Non Q-Wave M.I. symposium, The Clubhouse at Pelican Hill Golf Club, Newport Beach, California, November 17, 1999.
- 5. 32<sup>nd</sup> Annual Scientific Session of the Heart Association of Thailand. ACC International Initiative to Thailand, February, 2000.
- 6. "Current Surgical Options for Mitral Valve Repair in MV Prolapse," presented at The Mitral Valve in the Third Millennium symposium, Four Seasons Hotel, Newport Beach, CA, Saturday, March 11, 2000.
- 7. "Illustrative Case Studies of Mitral Valve Repair Presentations of Echo Surgical Approach, and Post repair outcome," presented at The Mitral Valve in the Third Millennium symposium, Four Seasons Hotel, Newport Beach, CA, Saturday, March 11, 2000.
- 8. "Surgical Techniques for Prevention of Post-Repair SAM," presented at Echo Montana 2000, Doubletree Hotel Edgewater, Missoula, MT, August 6-8, 2000.
- "Role of (non-transplant) Surgery and Devices in Management of Heart Failure," presented at Advances in Treatment of Heart Failure symposium, The Clubhouse at Pelican Hill Golf Club, Newport Beach, CA, January 18, 2001.
- 10. "Clinical Applications of Advances in Cardiology & Cardiac Surgery," Dharma Vira Heart Centre, Sir Ganga Ram Hospital, New Delhi, India, February 9–11, 2001.
- 11. "Surgical Techniques of Mitral Valve Repair in Myxomatous and Degenerative Valve Disease," presented at Transesophageal Echocardiography: Live Demonstration of Technique and Case Studies with Impact on Patient Management, American College of Cardiology, Heart House, Bethesda, MD, April 25–27, 2001.
- 12. "Newer Surgical Techniques in Aortic Valve and Root Surgery Including Valve Sparing Surgery," presented at Transesophageal Echocardiography: Live Demonstration of Technique and Case Studies with Impact on Patient Management, American College of Cardiology, Heart House, Bethesda, MD, April 25–27, 2001.
- "Current Surgical Options in Aortic, Mitral and Tricuspid Valve Disease," presented at 21<sup>st</sup> Advanced Echo Conference, - Current Applications and Challenging Case Studies, Newport Beach Marriott Hotel & Tennis Club, Newport Beach, California, May 30–June 2, 2001.
- 14. "Mitral Valve Repair Techniques: What Information from Echo Would be Useful to the Surgeon?," presented at 21<sup>st</sup> Advanced Echo Conference Current Applications and Challenging Case Studies, Newport Beach Marriott Hotel & Tennis Club, Newport Beach, California, May 30–June 2, 2001.

- 15. "Surgical approaches to deal with post repair SAM," presented at 21<sup>st</sup> Advanced Echo Conference Current Applications and Challenging Case Studies, Newport Beach Marriott Hotel & Tennis Club, Newport Beach, California, May 30–June 2, 2001.
- 16. "Intraoperative Echo and Management of Heart Valve Disease Live Demonstration from the OR", presented at Hoag Memorial Hospital Presbyterian, California, November 9, 2001.
- "Surgical Approaches to Mitral Valve Repair and Indications for Replacement Based on Valve Anatomy," presented at Transesophageal Echocardiography: Live Demonstration of Technique and Case Studies with Impact on Patient Management, American College of Cardiology, Heart House, Bethesda, MD, April 1–3, 2002.
- 18. "Surgical Options in Aortic Valve, Root, and Proximal Aortic Disorders," presented at Transesophageal Echocardiography: Live Demonstration of Technique and Case Studies with Impact on Patient Management, American College of Cardiology, Heart House, Bethesda, MD, April 1–3, 2002.
- 19. "Case Presentation and Intraoperative TEE Display: Demonstration of Mitral Valve Anatomy and Planned Approach for Repair," with Live Demonstration of Mitral Valve Repair and Post Repair TEE from the OR at Hoag Memorial Hospital Presbyterian, Newport Beach, Calif., presented at Intraoperative TEE and Current Surgical Options in Treatment of Valve Disease: Live Demonstrations and Case Studies, American College of Cardiology, Heart House, Bethesda, MD, April 12, 2002.
- 20. "Surgical Techniques for Mitral Valve Repair," with Live Demonstration of Mitral Valve Repair and Post-Repair Demonstration of the Valve and of Intraoperative Echo, presented at 22<sup>nd</sup> Advanced Echo Conference – Live Demonstration of Intraoperative Echo, Newport Beach Marriott Hotel & Tennis Club, Newport Beach, California, June 19–22, 2002.
- "Newer Surgical Approaches in Aortic Valve Disease: The Tissue Solution," presented at 22<sup>nd</sup> Advanced Echo Conference – Live Demonstration of Intraoperative Echo, Newport Beach Marriott Hotel & Tennis Club, Newport Beach, California, June 19–22, 2002.
- 22. "What's New in the Management of Heart Disease," presented at American Heart Association's 72<sup>nd</sup> Annual Symposium Hyatt Regency, Los Angeles, California, October 2, 2004.
- 23. "Complex Mitral Valve Repair" Live Case Presentation from Hoag Hospital CVOR, presented at the International Valve Symposium, Four Seasons Hotel, Newport Beach, CA, October 13-15, 2005.
- 24. "Post Mitral Valve Repair SAM: Preemption and Cure", presented at the International Valve Symposium, Four Seasons Hotel, Newport Beach, CA, October 13-15, 2005.
- 25. "Minimally Invasive MV Repair" Live Case Presentation from Hoag Hospital CVOR presented at the International Valve Symposium, Four Seasons Hotel, Newport Beach, CA, October 13-15, 2005.
- "MV Surgery/TV Surgery Newer Repair Techniques Anterior Leaflet Reduction/Duran Band Implantation" Wet Lab Demonstration; presented at the International Valve Symposium, Four Seasons Hotel, Newport Beach, CA, October 13-15, 2005.
- 27. "Clinical Outcome Following Second Pump Run to Revise Initial Mitral Valve Repair" presented at the World Congress of Cardiology 2006, Barcelona, Spain, September 2-6, 2006.

- "Wet Lab: Demonstrations of Valvular Anatomy with TEE Correlations", presented at the 26<sup>th</sup> Advanced Echo Conference – Hilton Waterfront Beach Resort, Huntington Beach, CA, October 25– 28, 2006.
- 29. "Demonstrations of Valve Pathology and the Surgical Plan" presented at the 26<sup>th</sup> Advanced Echo Conference Hilton Waterfront Beach Resort, Huntington Beach, CA, October 25–28, 2006.
- 30. "Wet Lab Demonstration of Valve Anatomy with Imaging Emphasis", presented at the International Valve Symposium, Hilton Waterfront Hotel, Huntington Beach, CA, October 17-21, 2007
- 31. "Live Surgery MV Repair", presented at the International Valve Symposium, Hilton Waterfront Hotel, Huntington Beach, CA, October 17-21, 2007.
- 32. "Surgical Options for Degenerative MV Disease with Excess Tissue (Barlow's Valve), presented at the International Valve Symposium, Hilton Waterfront Hotel, Huntington Beach, CA, October 17 21, 2007
- 33. "Robotic-Assisted MV Repair: Current Status", presented at the International Valve Symposium, Hilton Waterfront Hotel, Huntington Beach, CA, October 17-21, 2007
- 34. "Functional Anatomy and Management of Primary and Secondary Tricuspid Regurgitation: Surgical Approaches and Long-Term Results", presented at the International Valve Symposium, Hilton Waterfront Hotel, Huntington Beach, CA, October 17-21, 2007
- 35. "Wet Lab Demonstration of Valve Anatomy", presented at the 28<sup>th</sup> Advanced Echo 2008 28<sup>th</sup> Conference Hilton Waterfront Beach Resort, Huntington Beach, CA, October 20–22, 2008.
- 36. "Live Surgery Robotic-Assisted Mitral Valve Repair with Demonstration of Valve Anatomy and the Surgical Plan", presented at the 28<sup>th</sup> Advanced Echo Conference, Hilton Waterfront Beach Resort, Huntington Beach, CA, October 20–22, 2008.
- 37. "Aortic Valve Replacement in the Elderly: How Old is Too Old?", presented at the 28<sup>th</sup> Advanced Echo Conference Hilton Waterfront Beach Resort, Huntington Beach, CA, October 20–22, 2008.
- 38. "Live Surgery"- presented at the 1st National Heart Valve Repair & Heart Failure Surgery Workshop @ SAL Hospital & Medical Institute in Ahmedabad, India, January 15–18, 2009.
- 39. "Surgical Valve Innovations in Heart Valve Repair", presented at the Medtronic Heart Valve Repair Education Program – Hoag Hospital and The Westin Hotel, Santa Ana, CA, November 18–20, 2009.
- 40. "The Quality Initiative Development of a Heart Valve Clinic", presented at the Global Heart Valve Summit 2009, Ritz-Carlton, Marina del Rey, CA, December 3–5, 2009.
- 41. "Wet Lab: Live demonstration of valve anatomy", presented at the 29<sup>th</sup> Advanced Echo Conference 2010, Hilton Waterfront Beach Resort, Huntington Beach, CA, April 18–21, 2010.
- 42. "Live Surgery Mitral valve repair with demonstration of valve anatomy/surgical plan", presented at the 29<sup>th</sup> Advanced Echo Conference 2010, Hilton Waterfront Beach Resort, Huntington Beach, CA, April 18–21, 2010.
- "Heart Valve Innovations and Clinical Applications Anatomy", presented at the American Society of Echocardiography's (ASE) 21<sup>st</sup> Annual Scientific Sessions – San Diego Convention Center, San Diego, California, June 12, 2010.

- 44. "Selection of the Correct Valve Prosthesis in the Patient with Endocarditis," presented at the American Society of Echocardiography's (ASE) 21<sup>st</sup> Annual Scientific Sessions – San Diego Convention Center, San Diego, California, June 12, 2010.
- 45. "Surgical Valve Innovations in Mitral Valve Repair", presented at the Medtronic Mitral Valve Repair Education Program – Hoag Hospital and The Westin South Coast Hotel, Costa Mesa, CA, May 18–20, 2011.
- 46. "Predictions of Progression: How to Time Surgery" presented at the American Society of Echocardiography (ASE) 22nd Annual Scientific Sessions Montreal, Quebec, Canada, June 11, 2011.
- 47. "Repair Options for Barlow's Valve" presented at the 76<sup>th</sup> Annual Scientific Meeting of the Japanese Circulation Society Fukuoka, Japan, March 16, 2012.
- 48. "Devices and Surgical Options in Advanced Heart Failure" presented at the 76<sup>th</sup> Annual Scientific Meeting of the Japanese Circulation Society Fukuoka, Japan, March 18, 2012.
- 49. "Aortic Stenosis in the Elderly: How to Manage High Risk Inoperable Patient" presented at The Ritz Carlton Laguna Niguel, CA, June 25, 2012
- 50. "Physician's Perspective of the Role of Percutaneous Heart Valve Replacement" presented at OCTANe Program Discussion Edwards Lifesciences, One Edwards Way, Irvine, CA 92614, July 26, 2012
- 51. "Edwards SAPIEN Transcatheter Heart Valve" presented at Triage Consulting Group Clinical Breakthrough Day Hyatt Regency, San Francisco, CA September 14, 2012
- 52. "Live from OR A case of Mitral Valve Repair", presented at 31<sup>st</sup> Advanced Echo Conference, Marriott Hotel, Newport Beach, CA October 28-30, 2012
- 53. VENICE Presentation (6/22-6/25/2013)
- 54. "Wet Lab Demonstration: Valvular Anatomy with Echo Correlations"; 32<sup>nd</sup> Advance Echo Conference, September 26-28, 2013, Westin South Coast Plaza Hotel, Costa Mesa, CA
- 55. 2017 Invited Faculty; "Valve Surgery; It's a Team Effort; Surgical Techniques" 12<sup>th</sup> International Symposium, Echocardiography Today and Tomorrow, June 10-14, 2017 St. Wolfgang, Austria
- 56. "Wet Lab Demonstration of Valvular Anatomy"; "Mitral Valve Repair"; 34<sup>th</sup> Advanced Echo Conference, September 22-24, 2017, Newport Marriott Hotel Newport Beach, CA
- 57. Hoag Cardiovascular Nursing Conference, October 21, 2017, The Waterfront Beach Resort
- 58. 'Mitral Valve Surgical Repair" 35<sup>th</sup> Advanced Echo Conference, September 14-16, 2018, Newport Beach Fashion Island Hotel
- Advances in Heart Failure, Arrhythmias and Structural Heart Disease: A Case Based Update Raney v. Raney Surgical versus Percutaneous Approach for Valve Disease, October 20, 2018, Costa Mesa The Westin South Coast Plaza
- 60. Hoag Cardiovascular Nursing Conference, November 10, 2018, The Waterfront Beach Resort Cardiac Valve Anatomy/Correlation with Echo Raney A, Pandian, N.

61. "Hypertrophic Cardiomyopathy – When to Intervene, How to Plan and Do Myectomy" Raney A, Shah P; "Wet Lab Demonstration of Valvular Anatomy and Related Structures" – 36<sup>th</sup> Advanced Echo Conference, November 2-4, 2019, Huntington Beach, CA – The Waterfront Beach Resort