Updated 07/2023

CURRICULUM VITAE
RAM KUMAR SUBRAMANYAN, MD, PhD

A. PERSONAL INFORMATION:

Work	**Home**
8200 Dodge Street	806 S 96th St
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Phone: (402) 955-4320	Citizenship: United States of America

Work Email: rsubramanyan@childrensomaha.org

B. EDUCATION AND PROFESSIONAL APPOINTMENTS

EDUCATION:

Year	Degree, Field, Institution, City
1990	Secondary School, DAV Higher Secondary School, Madras 86, India
1992	High School, DAV Higher Secondary School, Madras, India Best graduating student, Valedictorian
1998	M.D. (M.B., B.S.) Madras Medical College, Madras, India Best graduating student, Valedictorian
2006	Ph.D. Pathobiology, University of Southern California, Los Angeles, California

POST- GRADUATE TRAINING:

Clinical Fellowship:

Year-Year	Training Type, Field, Mentor, Department, Institution, City
2001-2008	Residency, General Surgery, Tom R. DeMeester, MD, University of Southern California School of Medicine, Los Angeles, California
2008-2011	Residency, Thoracic Surgery, Vaughn A. Starnes, MD, University of Southern California School of Medicine, Los Angeles, California
2011-2012	Residency, Congenital Cardiac Surgery, Vaughn A. Starnes, MD, Children's Hospital of Los Angeles, Los Angeles, California

Research Fellowship:

Year-Year	Training Type, Field, Mentor, Department, Institution, City
1999	Research Fellow, Vascular Gene Therapy Research, Hong Yu, PhD, University of Southern California, Department of Surgery
1999- 2000	Research Fellow, Neurovascular Biology Research Center, Berislav Zlokovic, MD, PhD, University of Southern California, Department of Neurologic Surgery
2004- 2006	Research Fellow, Vascular Biology Laboratory, Parkash S. Gill, MD, University of Southern California, Department of Surgery

Updated 07/2023

ACADEMIC APPOINTMENTS:

Year- Year	Appointment	Department, Institution, City, Country
2023-Current	Professor	Division of Pediatric Cardiothoracic Surgery, Department of Surgery, University of Nebraska Medical Center
2012- 2023	Assistant Professor (clinical scholar track)	Department of Surgery and Pediatrics, University of Southern California, Los Angeles, California
2013- 2023	Director	Physician-Scientist Training (PST) PhD Program, Keck School of Medicine, University of Southern California, Los Angeles, California
2015- 2023	Director	Resident Research Program, Department of Surgery, University of Southern California, Los Angeles, California
2016- 2023	Co-Chair	Heart Institute Research Oversight Committee, Children's Hospital of Los Angeles, Los Angeles, California

CLINICAL APPOINTMENTS:

Year- Year	Appointment	Department, Institution, City, Country
2023-Current	Division Chief	Pediatric Cardiothoracic Surgery, Children's Hospital and Medical Center, Omaha, NE
2012- 2023	Attending Surgeon	Pediatric Cardiothoracic Surgery, Children's Hospital Los Angeles, Los Angeles, CA
2012- 2023	Attending Surgeon	Pediatric Cardiothoracic Surgery, Keck Medical Center of USC, Los Angeles, CA
2012- 2023	Attending Surgeon	Pediatric Cardiothoracic Surgery, Huntington Hospital, Pasadena, CA
2012- 2023	Attending Surgeon	Pediatric Cardiothoracic Surgery, Los Angeles County + University of Southern California Medical Center, Los Angeles, CA

C. LICENSURE, CERTIFICATIONS

LICENSURE:

Year	License number, State, Status
Expires 2024	#35742, NE Medical License
Expires 2024	#A81911, CA Medical License

BOARD CERTIFICATION OR ELIGIBILITY:

Year	Board, State, Status
2009	General Surgery, Active MOC

2012	Thoracic Surgery, Active MOC
2013	Congenital Cardiac Surgery, Active MOC

SPECIALTY CERTIFICATION:

Specialty Certification, Status
Fluoroscopy Certified
ECFMG, #0-540-867-9
Advanced Trauma Life Support Certified
Fundamentals of Critical Care Support

D. HONORS, AWARDS:

Year	Description	Awarding agency
1992	Best student of the city	Rotary International
1992	National Talent Search of India Scholarship	Awarded to top students across the nation
1992	Valedictorian	High school, DAV Higher Secondary School
1998	Valedictorian	Madras Medical College
2008	Outstanding scholar and Best teacher award	Department of Surgery, USC
2005	Dissertation Research Grant from Tobacco- Related Disease Research Program	California, USA
2009	Best resident teacher award	University of Southern California

E. TEACHING

National Education Endeavors:

Year-Year	Position, Committee	Organization/ Institution
2013-Current	Editor, Congenital Heart Surgery Curriculum	Society of Thoracic Surgeons
2013-Current	Section Editor, Congenital Heart Surgery, Thoracic Surgery Curriculum	Society of Thoracic Surgeons
2013-2018	Member, In-Training examination Committee	American Board of Thoracic Surgery
2018-2022	Member, SESATS committee	American Board of Thoracic Surgery

Research Education Endeavors:

National

Year-Year	Position, Committee	Organization/ Institution

2018-Current	Member, Research Committee	Thoracic Surgery Foundation
2019-Current	Member, Congenital Scholarship Committee	American Association for Thoracic Surgery

Keck School of Medicine of USC

2013- 2023 Director, Physician-Scientist PhD training Program
2014- 2023 Director, Resident Research Program, Department of Surgery
2014- 2023 Course Director, Clinical Perspectives of Regenerative Medicine
2015- 2023 Core Faculty, T32 training grant in Regenerative Medicine

Research Setting Skills	Level	Percentage of Time
1. Supervision of daily research activities and lab rotation	Post-Graduate Fellows, Graduate students and Research Associate	10%
2. Didactic curriculum education and thesis oversight	Graduate Students	5%

List of research Mentees
Graduate Education

1. Prashan De Zoysa – Graduate Mentor
2. Omar Toubat – Graduate Mentor
3. Drayton Harvey – Graduate Mentor
4. Riya Verma – Graduate Mentor
5. Jamie Golden – Graduate Dissertation Committee Chair
6. Michael Krainock - Graduate Dissertation Committee Chair
7. Michael Mallicote - Graduate Dissertation Committee Chair
8. Evelyn Tran - Graduate Dissertation Committee, Member
9. Peiheng Han - Graduate Dissertation Committee, Member

Post-doctoral Training

1. Jiang Liu, PhD – Post-doctoral Mentor – Currently research Scientist in industry
2. Binyun Ma, PhD – Post-doctoral Mentor – Currently in lab
3. Shirley Belshazzar, PhD – Post-doctoral Mentor – Currently research Scientist in industry
4. Jongkyu Choi, PhD – Post-doctoral Mentor – Currently in lab

Undergraduate and Medical Student mentees available upon request

Clinical Education Endeavors:

Keck School of Medicine of USC: CHLA, Keck Hospital of USC, LAC+ USC Medical Center

Clinical Setting Skills	Level	Percentage of Time
1. Operating room teaching	Medical Students, Residents and Fellows	2%

2.	Core curriculum lectures	Medical Students, Residents and Fellows	2%
3.	Bedside tutorials and teaching rounds	Medical Students, Residents and Fellows	2%
4.	Skills lab curriculum and cadaver lab dissections	Medical Students, Residents and Fellows	2%
5.	Patient write-ups	Medical Students, Residents and Fellows	2%

F. SERVICE

PROFESSIONAL SERVICE:

International/National Committee Service:

Year-Year	Position, Committee	Organization/ Institution
2021- Current	Chair, Congenital Heart Surgery Database Task Force	Society of Thoracic Surgeons
2017- Current	Chair, Congenital Heart Surgery Database Upgrade Committee	Society of Thoracic Surgeons
2020- Current	Member, Workforce on Quality	Society of Thoracic Surgeons
2019- Current	Member, Congenital Heart Surgery Workforce	Society of Thoracic Surgeons
2018- Current	Co-chair, Workforce on Databases	Society of Thoracic Surgeons
2015- Current	Member, Patient Information Task Force	Society of Thoracic Surgeons
2015- Current	Member, Curriculum Task Force	Society of Thoracic Surgeons
2019- 2022	Scientific Affairs and Government Relations Committee	American Association for Thoracic Surgery
2019- 2022	Congenital Clinical Practice Committee	American Association for Thoracic Surgery
2020	Co-Chair, Congenital Program Committee	American Association for Thoracic Surgery
2022-Current	Council Member	Western Thoracic Surgical Association
2020	Chair, Program Committee	Western Thoracic Surgical Association
2016- 2019	Member, Program Committee	Western Thoracic Surgical Association
2017- 2018	Member, Program Committee	CHOP - Update on Pediatric and Congenital Cardiovascular Disease
2017- Current	Board Member	HLHS Consortium
2018- Current	Physician Executive Committee	American Heart Association
2018- Current	Research Awards Committee	Thoracic Surgery Foundation
2020- Current	Chair, Scientific Advisory Committee	Pediatric Congenital Heart Association

Local Committee Service:

Year-Year	Position, Committee	Organization/ Institution

2015- 2023	Keck Research Council	Keck School of Medicine
2015- 2017	C-Change Task Force	Keck School of Medicine
2017- 2023	PIBBS (PhD) admission committee	Keck School of Medicine

PROFESSIONAL SOCIETY MEMBERSHIP:

Year- Year	Society
2006- Current	American College of Surgeons
2012- Current	American Heart Association
2012- Current	Society of Thoracic Surgeons
2015- Current	Western Thoracic Surgical Association
2017- Current	American Association of Thoracic Surgery (Elected)

MANUSCRIPT REVIEW:

Journal Editor

2020 – Current Congenital Editor - Seminars in Thoracic and Cardiovascular Surgery
2019 – Seminars in Thoracic and Cardiovascular Surgery: Pediatric Cardiac Surgery Annual

Editorial Board Membership

Journal of Thoracic and Cardiovascular Surgery
ASAIO Journal
World Journal of Pediatric and Congenital Heart Surgery
Enliven- Journal of Stem Cell Research & Regenerative Medicine

Year- Year	Journal
2013- Present	Ad-hoc reviewer: Journal of Cardiovascular Disease and Diagnosis
2013- Present	Ad-hoc reviewer: Scientific Research and Essays
2013- Present	Ad-hoc reviewer: Annals of Thoracic Surgery
2013- Present	Ad-hoc reviewer: Journal of American Heart Association
2015- Present	Ad-hoc reviewer: Circulation
2017-Present	Ad-hoc reviewer: Journal of Cardiothoracic Surgery

MAJOR AREAS OF RESEARCH INTEREST

As one of a handful of pediatric cardiac-surgeon scientists, my primary aim is to bridge the gap between bench research and bedside management. To that end, I run a funded basic science laboratory that studies molecular regulation of cardiac development and disease. The following is a summary of clinical, basic and translational research efforts that I am currently pursuing.

Outflow tract lesions comprise 30% of clinical congenital heart disease. Both right and left ventricular outflow tracts develop from a single set of second heart field progenitor cells. The common outflow tract then matures to align itself over the two ventricles, is septated into two outflow tracts and rotates so as to join the pulmonary artery or aorta, respectively. My lab focuses on studying the molecular regulation of these processes so as to provide a mechanistic basis for the most common form of congenital heart disease. My NIH grant funds the fundamental work that studies Notch signaling in maintaining the pool of progenitor cells required to form the early outflow tract. Defects in this process result in failure of proper alignment and double outlet right ventricle. With this background defect, we genetically reverse

translate human disease by generating mouse models that lend themselves to molecular analysis. We have one of the first mouse models of heart defects seen in Adams-Oliver Syndrome. We also have a model of double outlet right ventricle, malposed great vessels with arch anomalies, mimicking clinically relevant disease processes, such as Taussig-Bing anomaly. We use the spectrum of rotational abnormalities that can co-exist with double outlet right ventricle to reach our global aim of understanding how the different maturation processes in the outflow tract are inter-related. On the clinical side, my research focuses on the fate of the abnormally developed outflow tract. We study the fate of the right ventricular outflow tract in various forms of tetralogy, as well as left ventricular outflow tract following Ross procedure or switch in transposition.

A niche population that we have identified is the cohort of patients with concomitant cleft palate and congenital heart disease. Whereas the incidence of cleft palate amongst congenital heart disease patients is not striking, we have shown an enrichment of congenital heart defects in cleft palate patients. In particular, outflow tract defects (especially tetralogy and double outlet right ventricle) are over two-fold more common. We have generated a mouse model of concomitant cleft palate and double outlet right ventricle in my lab that mimics findings seen in Charge syndrome. Further, the common cell source between palate and heart development is neural crest cells. However, the cardiac phenotype enriched is not a neural crest phenotype. Our analysis sheds light on this apparent discrepancy and further allows us to understand how neural crest cells impact second heart field cells in outflow tract maturation.

Single ventricle management has evolved significantly in the last two decades. In the current age, most complex lesions can be palliated down a single ventricle pathway. However, not all palliations result in long term success. Our center has a large volume of complex single ventricle pathology. Several of our outcome analyses focus on non-cardiac factors that impact single ventricle outcomes. Our primary hypothesis is that pulmonary artery anatomy and physiology are important determinants of single ventricle outcome. We have studied the impact of pulmonary arterioplasty on short and long-term outcomes. We have also shown the impact of diaphragm function and pulmonary vascular resistance as well as the reasons for acute failure of single ventricle palliation. We also study the anatomy that lends itself to septation of ventricles with the goal of avoiding single ventricle palliation. In the lab, we model pulmonary endothelial biology using patient-derived iPSC and study approaches to improve pulmonary vascular hemodynamics.

Cardiomyocyte proliferation is a topic of major interest in the field of cardiac regeneration. We have demonstrated novel paracrine signaling pathways governed by EphB4-EphrinB2 in the embryo that control cardiomyocyte proliferation. Loss of these signals in the post-natal and adult life explains the inability of adult cardiomyocyte to replenish new cells following injury such as myocardial infarction. I successfully established a mouse cardiac injury and imaging program at USC. We have used this to study factors that explain strain-specific differences in the innate ability of cardiomyocytes to proliferate. This concept has become truly translational due to the HLHS consortium efforts. I am the site-PI for four clinical trials that evaluates the role of umbilical cord blood-derived mononuclear cell or mesenchymal stem cell injection on single right ventricle outcomes. Our center is the only west coast center offering this novel therapy to HLHS patients and one of two centers in North America offering both therapies. I am also the site-PI for the NIH-funded clinical trial evaluating the use of mesenchymal stem cells for HLHS.

Our lab also has an interest in angiogenesis. We have shown the maturation mechanisms that impact coronary artery formation following early vasculogenesis. My AHA grant extended these findings to modulating the vessel maturation proteins to favorably impact angiogenesis following myocardial infarction in adult mice.

In addition to these studies, I am also the site PI for the NIH-funded STRESS trial studying the role of steroids in neonatal and infant cardiac surgery. I also am an investigator in the Xeltis pulmonary artery conduit study.

GRANT SUPPORT- COMPLETED:

Grant No. (PI) 1K08HL121191 Subramanyan (P.I) Dates of Award 01/01/16- 12/31/21
Agency NHLBI Percent Effort
Title Role of delta-like ligand- 4 signaling in cardiac outflow tract development
Description: This proposal studies the biology of outflow tract development mediated by DLL4-Notch signaling axis

Grant No. (PI) R03 HL154301 Subramanyan (P.I) Dates of Award 08/01/20- 07/31/22
Agency NHLBI Percent Effort
Title Malposed Semilunar Valves in Double Outlet Right Ventricle - A Pilot Genetic Analysis
Description: This proposal studies the genetic defects that control outflow tract rotation in addition to alignment in DORV subtypes

Grant No. (co-PI) UG3HL148318Subramanyan (co-P.I) Dates of Award 08/01/20- 06/30/2023
Agency NHLBI Percent Effort
Title Allogeneic Human Mesenchymal Stem Cell (MSC) Injection in Patients with Hypoplastic Left Heart Syndrome: A Phase llb Clinical Trial (ELPIS)
Description : This proposal is a clinical study of injection of mesenchymal stem cells into the systemic ventricle of HLHS patients at Stage II palliation. I am the site-PI for this study at the only western US center.

Grant No. (PI) RMI Award Subramanyan (co- P.I) Dates of Award 03/01/16- 02/28/18
Agency Regenerative Medicine Program Percent Effort
Title Identify the role of PRMT1-p53 axis is mediating cardiac fibroblast fate transition in the injured heart
Description This study evaluates the role of PRMT-1/p53 in fate transition of cardiac fibroblasts into endothelial calls at sites of ischemia in the adult. Genetic and translational approaches will be used to modulate recovery from myocardial ischemia.

Grant No. (PI) UL1TR000242 Subramanyan (co-P.I) Dates of Award 07/01/18-12/31/21
Agency NIH/NCATS (SC CTSI) Percent Effort
Title Investigating the molecular mechanisms underlying concomitant cleft lip and/or palate and congenital heart disease: A genetic sequencing study
Description This proposal evaluates the genetic changes that underlie concomitant cleft palate and outflow tract congenital heart disease.

Grant No. (PI) Seed Grant Subramanyan (co-I) Dates of Award 04/01/16-03/31/22
Agency STOP cancer Percent Effort
Title Overexpressed EphB4- HAS provides survival advantages in lung cancer
Description The goal of this project is to study overexpression of EphB4 in lung cancer and its effect on cancer cell survival

Grant No. (PI) HLSF Grant Subramanyan (P.I) Dates of Award 07/01/17-06/30/21

Agency Heart and Lung Surgery Foundation Percent Effort
Title Outcomes of complex neonatal cardiac surgery
Description This proposal supports the training of cardiac surgery resident in science of cardiac surgical outcomes research

Grant No. (PI) 2R44CA168158 Subramanyan (co-P.I) Dates of Award 09/01/14-08/31/15
Agency NIH Percent Effort
Title Development of sEphB4-HSA as a novel therapeutic in cancer
Description This proposal seeks to develop a new cancer therapeutic compound as an SBIR. My lab established the pre-clinical models and performed pre-clinical studies for the final stages of development of this compound

Grant No. (PI) 14BGIA20500059 Subramanyan (P.I) Dates of Award 07/01/14- 06/30/16
Agency AHA Percent Effort
Title Role of delta-like ligand—4 Signaling in Myocardial Revascularization
Description :This proposal seeks to study the role of delta-like ligand-4 in stable neo-angiogenesis at sites of ischemia in the adult. Genetic and translational approaches to modulating DLL-4 expression will be used to modulate recovery from myocardial ischemia.

Dates of Award 07/01/13-06/30/14
Grant No. (PI) Pilot Award Subramanyan (P.I)
Agency Wright Foundation Percent Effort
Title Signaling by Delta- Like Ligand-4 expressed on endothelial cells is required for recovery from myocardial ischemia
Description The major goal of this project is to study the role of genetic modulation of endothelial DLL-4 in a minute myocardial ischemia model

Grant No. (PI) RMI Award Subramanyan (co- P.I) Dates of Award 03/01/16- 02/28/18
Agency Regenerative Medicine Program Percent Effort
Title Identify the role of PRMT1-p53 axis is mediating cardiac fibroblast fate transition in the injured heart
Description This study evaluates the role of PRMT-1/p53 in fate transition of cardiac fibroblasts into endothelial calls at sites of ischemia in the adult. Genetic and translational approaches will be used to modulate recovery from myocardial ischemia.

Grant No. (PI) UL1TR000130 Subramanyan (P.I) Dates of Award 03/01/14-06/30/15
Agency NIH/NCATS (SC CTSI) Percent Effort
Title Post- Operative Troponin Levels in Infants Undergoing Cardiac Surgery
Description This proposal seeks to establish normal troponin levels in children following various types of congenital heart surgery

Grant No. (PI) UL1TR000130 Subramanyan (P.I) Dates of Award 03/01/14-06/30/15
Agency NIH/NCATS (SC CTSI) Percent Effort
Title Modulation of delta-like ligand- 4 signaling improves recovery from myocardial ischemia
Description This is a translational study that seeks to alter systemic levels of NOTCH ligands to improve outcomes following myocardial infraction in a mouse model of coronary ligation.

INVITED LECTURES, SYMPOSIA, KEYNOTE ADDRESSES

Updated 07/2023

Year	Type	Title, Location
2006	Frontiers in Pathology Conference	EphB4- a domain for vessels; a domain for cancer. Los Angeles, CA
2006	Tenth Annual Max R. Gaspar Vascular Disease Symposium	Clinical application of angiogenesis: now and in the future. Los Angeles, CA
2012	Federation of fetal and perinatal sonographers	Surgical care of congenital heart disease: the role of the primatologist, India
2013	Pre-Clinical workshop of Molecular Imaging Center	Cardiovascular imaging in development and disease. Los Angeles, CA
2014	Molecular Imaging Program at Stanford	Cardiovascular imaging in development and disease. Los Angeles, CA
2015	American Heart Association, Los Angeles Chapter Symposium	Reciprocal paracrine signaling loop between the developing endocardium and myocardium regulates ventricular wall formation. Los Angeles, CA
2016	The 2016 Joint Conference on Advances in Pediatric Cardiovascular Disease Management	Building a Consortium to Improve Congenital Heart Disease Outcomes. Anaheim, CA
2017	Weinstein Cardiovascular Development and Regeneration Conference	DLL-4 signaling regulates second heart field progenitor pool and outflow tract development, Columbus, OH
2017	Weinstein Cardiovascular Development and Regeneration Conference	A novel reciprocal paracrine signaling loop mediated by transient expression of EphrinB2 in the myocardium regulates ventricular wall formation, Columbus, OH
2017	American College of Surgeons	Cultivating the next generation of Surgeon-Scientists, Webinar, Chicago, IL
2017	World Congress of Pediatric and Congenital Cardiac Surgery	History of Fontan Procedure, Barcelona, Spain
2017	World Congress of Pediatric and Congenital Cardiac Surgery	Long-Term Outcomes and Re-intervention in LVOT Following Neonatal Interventions, Barcelona, Spain
2017	Faculty of Veterinary Medicine, Lisbon University	Second Heart Field Development and Notch Signaling, Lisbon, Portugal
2017	Faculty of Veterinary Medicine, Lisbon University	DLL4 signaling in cardiac angiogenesis in development and disease, Lisbon, Portugal
2017	Cleft Symposium	Cleft Care: Cardiac Perspective, Los Angeles, CA
2017	Advances in Quality and Outcomes Conference	STS Congenital Heart Surgery Database Upgrade report, Chicago, IL
2017	Advances in Quality and Outcomes Conference	Aortic arch interventions, Chicago, IL
2018	21st Annual Update on Pediatric and Congenital Cardiovascular Disease	Vascular Health and Angiogenesis in Congenital Heart Care, Phoenix, AZ
2018	21st Annual Update on Pediatric and Congenital Cardiovascular Disease	The Spectrum of Surgical Interventions for Tricuspid Valve Conditions and Their Outcomes, Phoenix, AZ

2018	Symposium on Biodegradable Materials and Stem Cells in congenital heart disease management	Cell-cell interaction and the role of paracrine signaling in heart development and disease, Istanbul, Turkey
2019	22st Annual Update on Pediatric and Congenital Cardiovascular Disease	Stem Cells in HLHS – Hope or hype, Newport Beach, CA
2019	Asian Society for Cardiovascular and Thoracic Surgery	Ross procedure – indications and outcomes, Chennai, India
2019	Asian Society for Cardiovascular and Thoracic Surgery	Mitral valve repair approaches in children, Chennai, India
2019	Asian Society for Cardiovascular and Thoracic Surgery	Complex arterial switch procedures, Chennai, India
2019	Weinstein Cardiovascular Development and Regeneration Conference	DLL-4 signaling regulates outflow tract development via regulation of FGF-8 signaling, Indianapolis, IN
2019	Pediatric Cardiac Surgery Summit III	Management of the RVOT in infants with pulmonary atresia and VSD, San Diego, CA
2019	2019 Spring National Advanced Practice Neonatal Nurses Conference	Stem Cell Therapies for Hypoplastic Left Heart, Palm Springs, CA
2019	Advances in Quality and Outcomes Conference	Surgical management of Tetralogy of Fallot, New Orleans, LA

G. PUBLICATIONS:

REFEREED JOURNAL ARTICLES:

H-index – 31, i-10 index - 47

https://www.ncbi.nlm.nih.gov/myncbi/1T7lbjdIclskj/bibliography/public/

1. Pruetz JD, Kumar SR. Trying to Prove the Obvious? Ann Thorac Surg. 2022;114:209-10. doi: 10.1016/j.athoracsur.2021.05.015.
2. Toubat O, Choi J, **Kumar SR.** Modeling Paracrine Non-Canonical Wnt Signaling In Vitro. JoVE. 2021 Dec 10;(178). doi: 10.3791/63247.
3. Harvey DC, De Zoysa P, Toubat O, Choi J, Kishore J, Tsukamoto H, **Kumar SR.** Concomitant genetic defects potentiate the adverse impact of prenatal alcohol exposure on cardiac outflow tract maturation. Birth Defect Res. 2021 Dec 3. doi: 10.1002/bdr2.1968.
4. Harvey DC, Baer RJ, Bandoli G, Chambers CD, Jelliffe-Pawlowski L, **Kumar SR.** The Association of Alcohol Use Diagnostic Codes in Pregnancy and Offspring Conotruncal and Endocardial Cushion Heart Defects. J Am Heart Assoc. 2022 Jan 18;11(2):e022175. doi: 10.1161/JAHA.121.022175.

5. **Kumar SR**, Mayer JE Jr, Overman DM, Shashidharan S, Wellnitz C, Jacobs JP. The Society of Thoracic Surgeons Congenital Heart Surgery Database: 2021 Update on Outcomes and Research. Ann Thorac Surg. 2021 Dec;112(6):1753-1762.
6. Cleveland JD, **Kumar SR**. In analytics we trust? J Thorac Cardiovasc Surg. 2021 Dec 3:S0022-5223(21)01703-7. doi: 10.1016/j.jtcvs.2021.11.075.
7. Emamaullee J, Khan S, Weaver C, Goldbeck C, Yanni G, Kohli R, Genyk Y, Zhou S, Shillingford N, Sullivan PM, Takao C, Detterich J, Kantor PF, Cleveland JD, Herrington C, **Kumar SR**, Starnes V, Badran S, Patel ND. Non-invasive biomarkers of Fontan-associated liver disease. JHEP Rep. 2021 Dec;3(6):100362. doi: 10.1016/j.jhepr.2021.100362.
8. Jacobs JP, Nelson JS, Fuller S, Scholl FG, **Kumar SR**, Jacobs ML. Risk adjustment for cardiac surgery in adults with congenital heart disease: what do we know and what do we need to learn? Eur J Cardiothorac Surg. 2021 Aug 27;doi: 10.1093/ejcts/ezab266.
9. **Kumar SR**. Commentary: Delivering the cargo…. J Thorac Cardiovasc Surg. 2021 Sep;162(3):987-989
10. **Kumar SR**. Does It Measure Up? World J Pediatr Congenit Heart Surg. 2021 Jul;12(4):461-462.
11. De Zoysa P, Toubat O, Harvey D, Choi J, **Kumar SR**. Murine Model of Cardiac Defects Observed in Adams-Oliver Syndrome Driven by *Delta-Like Ligand-4* Haploinsufficiency. Stem Cells Dev. 2021 Jun 15;30(12):611-621.
12. Wiggins LM, **Kumar SR**, Starnes VA. The Ross Procedure in Children: The Gold Standard? Semin Thorac Cardiovasc Surg Pediatr Card Surg Annu. 2021;24:62-66.
13. Cleveland JD, **Kumar SR**. Current opinion in pediatric heart transplantation. Curr Opin Organ Transplant. 2021 Jun 1;26(3):290-295.
14. Pruetz JD, **Kumar SR**. Trying to prove the obvious? Ann Thorac Surg. 2021 May 31;. doi: 10.1016/j.athoracsur.2021.05.015.
15. Tran NN, Votava-Smith JK, Wood JC, Panigrahy A, Wee CP, Borzage M, **Kumar SR**, Murray PM, Brecht ML, Paquette L, Brady KM, Peterson BS. Cerebral oxygen saturation and cerebrovascular instability in newborn infants with congenital heart disease compared to healthy controls. PLoS One.2021;16(5):e0251255. doi: 10.1371/journal.pone.0251255.
16. Fuller S, **Kumar SR**, Roy N, Mahle WT, Romano JC, Nelson JS, Hammel JM, Imamura M, Zhang H, Fremes SE, McHugh-Grant S, Nicolson SC. The American Association for Thoracic Surgery Congenital Cardiac Surgery Working Group 2021 consensus document on a comprehensive perioperative approach to enhanced recovery after pediatric cardiac surgery. J Thorac Cardiovasc Surg. 2021 Sep;162(3):931-954
17. Cleveland JD, **Kumar SR**. The Right Heart for Delayed Sternal Closure?. Ann Thorac Surg. 2021 Mar 31;. doi: 10.1016/j.athoracsur.2021.03.058.
18. Wiggins LM, **Kumar SR**. Commentary: The MELD-XI score in Fontan patients: It's about time. J Thorac Cardiovasc Surg. 2021 Mar 16;. doi: 10.1016/j.jtcvs.2021.03.036.
19. Jacobs ML, Jacobs JP, Thibault D, Hill KD, Anderson BR, Eghtesady P, Karamlou T, **Kumar SR**, Mayer JE, Mery CM, Nathan M, Overman DM, Pasquali SK, St Louis JD, Shahian D, O'Brien SM. Updating an Empirically Based Tool for Analyzing Congenital Heart Surgery Mortality. World J Pediatr Congenit Heart Surg. 2021 Mar;12(2):246-281.
20. Hartiala JA, Han Y, Jia Q, Hilser JR, Huang P, Gukasyan J, Schwartzman WS, Cai Z, Biswas S, Trégouët DA, Smith NL, Seldin M, Pan C, Mehrabian M, Lusis AJ, Bazeley P, Sun YV, Liu C, Quyyumi AA, Scholz M, Thiery J, Delgado GE, Kleber ME, März W, Howe LJ, Asselbergs FW, van Vugt M, Vlachojannis GJ, Patel RS, Lyytikäinen LP, Kähönen M, Lehtimäki T, Nieminen TVM, Kuukasjärvi P, Laurikka JO, Chang X, Heng CK, Jiang R, Kraus WE, Hauser ER, Ferguson JF, Reilly MP, Ito K, Koyama S, Kamatani Y, Komuro I, Stolze LK, Romanoski CE, Khan MD, Turner AW, Miller CL, Aherrahrou R, Civelek M, Ma L, Björkegren JLM,

Kumar SR, Tang WHW, Hazen SL, Allayee H. Genome-wide analysis identifies novel susceptibility loci for myocardial infarction. Eur Heart J. 2021 Mar 1;42(9):919-933. doi: 10.1093/eurheartj/ehaa1040.

21. Starnes VA, Elsayed RS, Cohen RG, Olds AP, Bojko MM, Mack WJ, Cutri RM, Baertsch HC, Baker CJ, **Kumar SR**, Bowdish ME. Long-term outcomes with the pulmonary autograft inclusion technique in adults with bicuspid aortic valves undergoing the Ross procedure. J Thorac Cardiovasc Surg. 2021 Feb 4. doi: 10.1016/j.jtcvs.2021.01.101.
22. Cleveland JD, **Kumar SR**. Commentary: In pursuit of the perfect pulmonary valve…. J Thorac Cardiovasc Surg. 2021 Feb;161(2):365-367.
23. Mallios DN, Gray WH, Cheng AL, Wells WJ, Starnes VA, **Kumar SR**. Biventricular Repair in Interrupted Aortic Arch and Ventricular Septal Defect With a Small Left Ventricular Outflow Tract. Ann Thorac Surg. 2021 Feb;111(2):637-644.
24. Cleveland JD, Bowdish ME, Mack WJ, Kim RW, **Kumar SR**, Kallin K, Herrington CS, Wells WJ, Starnes VA. Resident education in congenital heart surgery does not compromise outcomes. J Thorac Cardiovasc Surg. 2021 Jan 11;. doi: 10.1016/j.jtcvs.2020.12.112.
25. Kim MH, Nguyen A, Lo M, **Kumar SR**, Bucuvalas J, Glynn EF, Hoffman MA, Fischer R, Emamaullee J. Big Data in Transplantation Practice-the Devil Is in the Detail-Fontan-associated Liver Disease. Transplantation. 2021 Jan 1;105(1):18-22.
26. Toubat O, Mallios, DN, Munabi, N, Magee WP, Starnes VA, **Kumar SR**. Clinical importance of concomitant cleft lip/palate in the surgical management of patients with congenital heart disease. World J Pediatr Congenit Heart Surg. 2021 Jan;12(1):35-42.
27. Mayer JE Jr, Hill K, Jacobs JP, Overman DM, **Kumar SR**. The Society of Thoracic Surgeons Congenital Heart Surgery Database: 2020 Update on Outcomes and Research. Ann Thorac Surg. 2020 Dec;110(6):1809-1818.
28. Cleveland JD, **Kumar SR.** The sound of one hand clapping… World J Pediatr Congenit Heart Surg. 2020 Sep;11(5):625-626.
29. De Zoysa P, Liu J, Toubat O, Choi J, Moon A, Gill PS, Duarte A, Sucov HM, **Kumar SR.** Delta-like ligand-4 mediated Notch signaling controls proliferation of second heart field progenitor cells by regulating Fgf8 expression. Development. 2020 Aug 10:dev.185249. doi: 10.1242/dev.185249.
30. **Kumar SR**, Bainiwal J, Cleveland JD, Pike N, Wells WJ, Starnes VA. Impact of prior diaphragm plication on subsequent stages of single ventricle palliation. J Thorac Cardiovasc Surg. 2020 Jun 20:S0022-5223(20)31524-5. doi: 10.1016/j.jtcvs.2020.06.007
31. **Kumar SR**. Commentary: Delivering the cargo…. J Thorac Cardiovasc Surg. 2020 Aug 21;. doi: 10.1016/j.jtcvs.2020.08.046.
32. Kim MH, Nguyen A, Lo M, **Kumar SR**, Bucuvalas J, Glynn EF, Hoffman MA, Fischer R, Emamaullee J. Big Data in Transplantation Practice - the Devil Is in the Detail - Fontan-associated Liver Disease. Transplantation. 2020 Jul 2. doi: 10.1097/TP.0000000000003308.
33. Azadgoli B, Munabi NCO, Fahradyan A, Auslander A, McCullough M, Aflatooni N, Davidson Ward SL, **Kumar SR**, Sanchez-Lara PA, Swanson J, Magee WP 3rd. Congenital Heart Disease in Patients With Cleft Lip/Palate and Its Impact on Cleft Management. Cleft Palate Craniofac J. 2020 Aug;57(8):957-966.
34. **Kumar SR.** It takes a village… Semin Thorac Cardiovasc Surg. 2020 May 21:S1043-0679(20)30138-6.
35. Gong CL, Song AY, Horak R, Friedlich PS, Lakshmanan A, Pruetz JD, Yieh L, Kumar SR, Williams RG. Impact of Confounding on Cost, Survival, and Length-of-Stay Outcomes for Neonates with Hypoplastic Left Heart Syndrome Undergoing Stage 1 Palliation Surgery. Pediatr Cardiol. 2020 Jun;41(5):996-1011.

36. Toubat O, **Kumar SR.** Molecular Approaches in Single Ventricle Management. Semin Thorac Cardiovasc Surg Pediatr Card Surg Annu. 2020;23:77-85. doi: 10.1053/j.pcsu.2020.03.003.
37. Emani SM, **Kumar SR.** Looking Ahead in Pediatric Cardiac Surgery. Semin Thorac Cardiovasc Surg Pediatr Card Surg Annu. 2020;23:1. doi: 10.1053/j.pcsu.2020.03.004.
38. Shen H, Gan P, Wang K, Darehzereshki A, Wang K, **Kumar SR**, Lien CL, Patterson M, Tao G, Sucov HM. Mononuclear diploid cardiomyocytes support neonatal mouse heart regeneration in response to paracrine IGF2 signaling. Elife. 2020 Mar 13;9:e53071. doi: 10.7554/eLife.53071.
39. Harvey DC, **Kumar SR.** If you want blood. J Thorac Cardiovasc Surg. 2020 May;159(5):2010-2011.
40. Cohen RG, **Kumar SR**, Lin J, Reddy RM, Kane L, Bagley J, Juarez A, Fleischman F, Farkas EA, Hackmann AE, Grubb KJ, Reddy S, Erhunmwunsee L, Villamizar NR, Masood MF, Griffin M, Boden N. The disparity between public utilization and surgeon awareness of the STS patient education website. Ann Thorac Surg. 2020 Jul;110(1):284-289.
41. Gong CL, Song AY, Horak R, Friedlich PS, Lakshmanan A, Pruetz JD, Yieh L, **Kumar SR**, Williams RG. Impact of Confounding on Cost, Survival, and Length-of-Stay Outcomes for Neonates with Hypoplastic Left Heart Syndrome Undergoing Stage 1 Palliation Surgery. Pediatr Cardiol. 2020 Jun;41(5):996-1011.
42. Hill KD, Baldwin HS, Bichel DP, Butts RJ, Chamberlain RC, Ellis AM, Graham EM, Hickerson J, Hornik CP, Jacobs JP, Jacobs ML, Jaquiss RD, Kannankeril PJ, O'Brien SM, Torok R, Turek JW, Li JS; STRESS Network Investigators (**Kumar SR**). Rationale and design of the STeroids to REduce Systemic inflammation after infant heart Surgery (STRESS) trial. Am Heart J. 2020 Feb;220:192-202.
43. Eckhauser AW, Van Rompay MI, Ravishankar C, Newburger JW, **Kumar SR**, Pizarro C, Ghanayem N, Trachtenberg FL, Burns KM, Hill GD, Atz AM, Hamstra MS, Mazwi M, Park P, Richmond ME, Wolf M, Zampi JD, Jacobs JP, Minich LL; Pediatric Heart Network Investigators.Variation in care for children undergoing the Fontan operation for hypoplastic left heart syndrome. Cardiol Young. 2019 Dec;29(12):1510-1516.
44. Goldberg R, Kumar SR. Aortic Valve Neo-Cuspidization in Children - Ready for Prime Time Yet?. World J Pediatr Congenit Heart Surg. 2019 Nov;10(6):731-732.
45. Jacobs ML, Jacobs JP, Hill KD, O'Brien SM, Pasquali SK, Vener D, **Kumar SR**, Chiswell K, St Louis JD, Mayer JE, Habib RH, Shahian DM, Fernandez FG. The Society of Thoracic Surgeons Congenital Heart Surgery Database: 2019 Update on Research.Ann Thorac Surg. 2019 Sep;108(3):671-679.
46. Overman DM, Jacobs ML, O'Brien JE Jr, **Kumar SR**, Mayer JE Jr, Ebel A, Clarke DR, Jacobs JP. Ten Years of Data Verification: The Society of Thoracic Surgeons Congenital Heart Surgery Database Audits. World J Pediatr Congenit Heart Surg. 2019 Jul;10(4):454-463.
47. **Kumar SR**. Two Sides of a Coin. Semin Thorac Cardiovasc Surg. 2019 Autumn;31(3):569-570.
48. Wang K, Shen H, Gan P, Cavallero S, **Kumar SR**, Lien CL, Sucov HM. Differential roles of insulin like growth factor 1 receptor and insulin receptor during embryonic heart development. BMC Dev Biol. 2019 Mar 25;19(1):5.
49. Jacobs JP, O'Brien SM, Hill KD, **Kumar SR**, Austin EH 3rd, Gaynor JW, Gruber PJ, Jonas RA, Pasquali SK, Pizarro C, St Louis JD, Meza J, Thibault D, Shahian DM, Mayer JE Jr, Jacobs ML. Refining The Society of Thoracic Surgeons Congenital Heart Surgery Database Mortality Risk Model With Enhanced Risk Adjustment for Chromosomal Abnormalities, Syndromes, and Noncardiac Congenital Anatomic Abnormalities. Ann Thorac Surg. 2019 Aug;108(2):558-566.
50. Anderson BR, **Kumar SR**, Gottlieb-Sen D, Liava'a MH, Hill KD, Jacobs JP, Moga FX, Overman DM, Newburger JW, Glied SA, Bacha EA; Congenital Heart Technical Skill Study. The Congenital Heart Technical Skill Study: Rationale and Design. World J Pediatr Congenit Heart Surg. 2019 Mar;10(2):137-144.

51. Wiggins LM, Wells WJ, Starnes VA, **Kumar SR**. Simultaneous Systemic to Pulmonary Shunt and Pulmonary Artery Banding is a Viable Option for Neonatal Palliation of Single Ventricle Physiology. Semin Thorac Cardiovasc Surg. 2019 Summer;31(2):234-241.
52. Su JA, **Kumar SR**, Mahmoud H, Bowdish ME, Toubat O, Wood JC, Kung GC. Postoperative Serum Troponin Trends in Infants Undergoing Cardiac Surgery. Semin Thorac Cardiovasc Surg. 2019 Summer;31(2):244-251.
53. Mallios DN, **Kumar SR**. Commentary: Midaortic syndrome-What is the skinny? J Thorac Cardiovasc Surg. 2019 May;157(5):e285-e286.
54. **Kumar SR**. Scientific process. J Thorac Cardiovasc Surg. 2019 Apr;157(4):e208-e209.
55. Choi D, Park E, Jung E, Cha B, Lee S, Yu J, Kim PM, Lee S, Hong YJ, Koh CJ, Cho CW, Wu Y, Li Jeon N, Wong AK, Shin L, **Kumar SR**, Bermejo-Moreno I, Srinivasan RS, Cho IT, Hong YK. Piezo1 incorporates mechanical force signals into the genetic program that governs lymphatic valve development and maintenance. JCI Insight. 2019 Mar 7;4(5).
56. Jacobs JP, Mayer JE Jr, Pasquali SK, Hill KD, Overman DM, St Louis JD, **Kumar SR**, Backer CL, Tweddell JS, Dearani JA, Jacobs ML. The Society of Thoracic Surgeons Congenital Heart Surgery Database: 2019 Update on Outcomes and Quality. Ann Thorac Surg. 2019 Mar;107(3):691-704.
57. Hsu KH, Wong P, **Kumar SR**, Evans J, Noori S. Predictors of Respiratory Improvement 1 Week after Ligation of Patent Ductus Arteriosus in Preterm Infants. J Pediatr. 2019 Feb;205:49-54.
58. Mallios DN, **Kumar SR**. Newer advances, newer challenges? J Thorac Cardiovasc Surg. 2019 Jan;157(1):e9-e10.
59. Tran S, Sullivan PM, Cleveland J, **Kumar SR**, Takao C. Elevated Pulmonary Artery Pressure, Not Pulmonary Vascular Resistance, is an Independent Predictor of Short-Term Morbidity Following Bidirectional Cavopulmonary Connection.Pediatr Cardiol. 2018 Dec;39(8):1572-1580.
60. Tran NN, **Kumar SR**, Hodge FS, Macey PM. Cerebral Autoregulation in Neonates With and Without Congenital Heart Disease. Am J Crit Care. 2018 Sep;27(5):410-416.
61. Jacobs ML, Jacobs JP, Hill KD, O'Brien SM, Pasquali SK, Vener D, Kumar SR, Chiswell K, Habib RH, Shahian DM, Fernandez FG.The Society of Thoracic Surgeons Congenital Heart Surgery Database: 2018 Update on Research. Ann Thorac Surg. 2018 Sep;106(3):654-663.
62. Gray WH, Wells WJ, Starnes VA, **Kumar SR**. Arch Augmentation via Median Sternotomy for Coarctation of Aorta With Proximal Arch Hypoplasia. Ann Thorac Surg. 2018 Oct;106(4):1214-1219.
63. Domadia S, **Kumar SR**, Votava-Smith JK, Pruetz JD. Neonatal Outcomes in Total Anomalous Pulmonary Venous Return: The Role of Prenatal Diagnosis and Pulmonary Venous Obstruction. Pediatr Cardiol. 2018 Oct;39(7):1346-1354.
64. Holst KA, Dearani JA, Said SM, Davies RR, Pizarro C, Knott-Craig C, Kumar TKS, Starnes VA, **Kumar SR**, Pasquali SK, Thibault DP, Meza JM, Hill KD, Chiswell K, Jacobs JP, Jacobs ML. Surgical Management and Outcomes of Ebstein Anomaly in Neonates and Infants: A Society of Thoracic Surgeons Congenital Heart Surgery Database Analysis. Ann Thorac Surg. 2018 Sep;106(3):785-791.
65. Gray WH, **Kumar SR**. Still young at heart…The Journal of thoracic and cardiovascular surgery. 2018; 156(3); 1177- 1178
66. **Kumar SR.** Collateral benefit in pulmonary artesia with ventricular septal defect? The Journal of thoracic and cardiovascular surgery. 2018; 156(3): 1205-1206
67. **Kumar SR**, Scott N, Wells WJ, Starnes VA. Liberal Use of Delayed Sternal Closure Is Not Associated With Increased Morbidity. The Annals of Thoracic Surgery 2018; 106(2) 581-586.

68. Cleveland JD, Tran S, Takao C, Wells WJ, Starnes VA, **Kumar SR.** Need for Pulmonary Arterioplasty During Glenn Independently Predicts Inferior Surgical Outcome. The Annals of thoracic surgery. 2018; 106(1): 156-164
69. Tran S, Sullivan PM, Cleveland J, **Kumar SR**, Takao C. Elevated Pulmonary Artery Pressure, Not Pulmonary Vascular Resistance, is an Independent Predictor of Short- Term Morbidity Following Bidirectional Cavopulmonary Connection. Pediatr Cardiol. 2018 Dec;39(8):1572-1580.
70. Wiggins LM, **Kumar SR.** The root cause of anxiety during reoperative aortic valve surgery. The Journal of thoracic and cardiovascular surgery. 2018; 155(6): e183-e184.
71. Domadia S, **Kumar SR**, Votava-Smith JK, Pruetz JD. Neonatal Outcomes in Total Anomalous Pulmonary Venous Return: The Role of Prenatal Diagnosis and Pulmonary Venous Obstruction. Pediatric Cardiology. 2018;
72. Karamlou T, Peyvandi S, Federman M, Goff D, Murthy R, **Kumar SR.** Resolving the Fontan paradox: Addressing Socioeconomic and racial disparities in patients with a single ventricle. The Journal of thoracic and cardiovascular surgery. 2018; 155(4): 1727-1731
73. Gray WH, **Kumar SR**. Coronary transfer during arterial switch-the heart of the matter? The Journal of thoracic and cardiovascular surgery. 2018; 155(4)e133- e134.
74. Jacobs JP, Mayer JE Jr, Paquali SK, Hill KD, Overman DM, St Louis JD, **Kumar SR**, Backer CL, Fraser CD, Tweddell JS, Jacobs ML. The Society of Thoracic Surgeons Congenital Heart Surgery Database: 2018 Update on Outcomes and Quality. The Annals of thoracic surgery. 2018; 105(3):680-689
75. **Kumar SR.** Expanding options to manage traumatic thoracic vascular injuries. The Journal of thoracic and cardiovascular surgery. 2018; 155(2):e77-e78.
76. Fleischman F, Elsayed RS, Cohen RG, Tatum JM, **Kumar SR,** Kazerouni K, Mack WJ, Barr ML, Cunningham MJ, Hackmann AE, Baker CJ, Starnes VA, Bowdish ME. Selective Aortic Arch and Root Replacement in Repair of Acute Type A Aortic Dissection. The Annals of thoracic surgery, 2018; 105(2): 505-512.
77. Noori S, **Kumar SR.** Pre-dicting post-ligation syndrome. The journal of thoracic and cardiovascular surgery. 2017; 154(6): 2060-2061.

78. **Kumar SR.** Immune System in Single Ventricle Patients-A Complex Nexus. World Journal for Pediatric and Congenital Heart Surgery. 2017; 8(6): 683-684.

79. **Kumar SR.** Myriad manifestations of myxoma. The Journal of thoracic and cardiovascular surgery. 2017; 154(4):1383-1384.

80. Patterson M, Barske L, Van Handel B, Rau CD, Gan P, Sharma A, Parikh S, Denholtz M, Huang Y, Yamaguchi Y, Shen H, Allayee H, Crump JG, Force TI, Lien CL, Makita T, Lusis AJ, **Kumar SR,** Sucov HM. Frequency of mononuclear diploid cardiomyocytes underlines natural variation in heart regeneration. Nature genetics. 2017; 49(9): 1346-1353.
81. Jacobs ML, Jacobs J, Hill KD, Hornik C, O'Brien SM, Pasquali SK, Vener D, **Kumar SR,** Habib RH, Shanian DM, Edwards FH, Fernandez FG. The Society of Thoracic Surgeons Congenital Heart Surgery Database: 2017 Update on Research. The Annals of thoracic Surgery. 2017; 104(3): 731-741.
82. **Kumar SR**. Mitochondrial transplantation: Another miracle of molecular medicine? The Journal of thoracic and cardiovascular surgery. 2017; 154(1): 284-285.

83. **Kumar SR**. A potential window into surgical outcomes for Berry syndrome. The Journal of thoracic and cardiovascular surgery. 2017; 153(5):1148-1149

84. Harbison AL, Votava-Smith JK, Del Castillo S, **Kumar SR,** Lee V, Schmithorst V, Lai HA, O'Neil S, Bluml S, Paquette L, Panigrahy A. Clinical Factors Associated with Cerebral Metabolism in Term Neonates with Congenital Heart Disease. The Journal of pediatrics. 2017; 183:67-73. E1. NIHMS838391
85. Castellanos DA, Herrington C, Adler S, Haas K, **Kumar SR,** Kung GC. Erratum to: Home Monitoring Program Reduces Mortality in High- Risk Sociodemographic Single-Ventricle Patients. Pediatric Cardiology. 2017;38(1):206
86. Bowdish ME, **Kumar SR**, Starnes VA. The Ross procedure: an excellent option in the right hands. Annals of translation medicine. 2016; 4(23):471

87. Luu M, Friedlich P, Votava-Smith JK, Pruetz JD, **Kumar SR**, Lakshmanan A. Resource Utilization in the State of California for Neonates with Hypoplastic Left Heart Syndrome. Pediatrics 2016
88. Castellanos, DA, Herrington C, Adler S, **Kumar SR**, Kung GC. Home Monitoring Program Reduces Mortality in High-Risk Sociodemograpghic Single-Ventricle Patients. Pediatric Cardiology 2016; 37(8):1575-1580
89. **Kumar SR**, Bansal N, Wells WJ, Starnes VA. Outcomes of re-intervention on the autograft following Ross procedure. Ann Thorac Surg. In Press.

90. **Kumar SR,** Kung G, Noh N, Castillo N, Fagan B, Wells, WJ, Starnes VA. Single Ventricle Outcomes Following Neonatal Palliation of Severe Ebstein's Anomaly with Modified Starnes Procedure. Circulation. 2016; 134(17):1257-1264
91. **Kumar SR.** Ensuring compliance in the hemodynamic outcome. J Thorac Cardiovasc Surg. In Press.

92. Wells WJ, **Kumar SR**. Aortopulmonary collaterals: Angiogenesis, or a whole lot more? J Thorac Cardiovasc Surg. 2016; 151:1135-6.

93. Ma M, Li P, Shen H, Estrada KD, Xu J, **Kumar SR**, Sucov HM. Dysregulated endocardial TGFβ signaling and mesenchymal transformation result in heart outflow tract septation failure. Developmental biology. 2016;409:272-6.
94. Shashidharan S, Wells WJ, Detterich J, Wong J, **Kumar SR**. Giant Pseudoaneurysm of Reconstructed Right Ventricular Outflow Tract. Ann Thorac Surg. 2015; 100:734.

95. Wiggins L, **Kumar SR**, Starnes VA, Wells WJ. Arterioplasty for Right Ventricular Outflow Tract Obstruction Following Arterial Switch is a Durable Procedure. Ann Thorac Surg. 2015; 100:122-7; discussion 127-8.
96. Bansal N, **Kumar SR**, Baker CJ, Lemus R, Wells WJ, Starnes VA. Age-related outcomes of the Ross procedure over twenty years. Ann Thorac Surg. 2015; 99:2077-83; discussion 2084-5.

97. Cavallero S, Shen H, Yi CE, **Kumar SR**, Sucov HM. CXCL12 plays a critical role in maturation of coronary vasculature during heart development. Dev Cell. 2015;33:469-77

98. Shen H, Cavallero S, Estrada KD, Sandovici I, **Kumar SR**, Makita T, Lien CL, Constancia M, Sucov HM. Extracardiac control of embryonic cardiomyocyte proliferation and ventricular wall expansion. Cardiovasc Res. 2015;105:271-8
99. Yamaguchi Y, Cavallero S, Patterson M, Shen H, Xu J, **Kumar SR**, Sucov HM. Adipogenesis and epicardial adipose tissue: a novel fate of the epicardium induced by mesenchymal transformation and PPARγ activation. Proc Natl Acad Sci U S A. 2015;112:2070-5.
100 Nathan M, Sleeper LA, Ohye RG, Frommelt PC, Caldarone CA, Tweddell JS, Lu M, Pearson GD, Gaynor JW, Pizarro C, Williams IA, Colan SD, Dunbar-Masterson C, Gruber PJ, Hill K, Hirsch-Romano J, Jacobs JP, Kaltman JR, **Kumar SR**, Morales D, Bradley SM, Kanter K, Newburger JW; Pediatric Heart Network Investigators. Technical performance score is associated with outcomes after the Norwood procedure. J Thorac Cardiovasc Surg. 2014;148:2208-14.
101 Li X, Choi WW, Yan R, Yu H, Krasnoperov V, **Kumar SR**, Schuckman A, Klumpp DJ, Pan CX, Quinn D, Gill IS, Gill PS, Liu R. The Differential Expression of EphB2 and EphB4 Receptor Kinases in Normal Bladder and in Transitional Cell Carcinoma of the Bladder. PLoS One. 2014 Aug 22;9(8):e105326.
102 Endocardial EphB4 Signaling Regulates Neuregulin-1 Expression and is Critically Required for Myocarditis Development. Circulation. 2014; 130; A19542.

103 Liu R, Trindade A, Sun Z, **Kumar SR**, Weaver FA, Krasnoperov V, Naga K, Duarte A, Gill PS. Inhibition of Notch signaling by Dll4-Fc promotes reperfusion of acutely ischemic tissues. Biochem Biophys Res Commun. 2012;418(1):173-9.
104 Alexopoulos SP, Lindberg L, **Kumar SR**, Matsuoka L. Cytomegalovirus prophylaxis in solid organ transplantation Curr. Med. Chem. 2012;19(35):5957-63.

105 Ham SW, **Kumar SR**, Rowe VL, Weaver FA. Disease progression after initial surgical intervention for Takayasu arteritis. J Vasc Surg. 2011;54(5):1345-51

106 Ham SW, **Kumar SR**, Wang BR, Rowe VL, Weaver FA. Late outcomes of endovascular and open revascularization for nonatherosclerotic renal artery disease. Arch Surg. 2010;145(9):832-9.
107 Nath DS, Nussbaum DP, Yurko C, Ragab OM, Shin AJ, **Kumar SR**, Starnes VA, Wells WJ. Pulmonary homograft monocusp reconstruction of the right ventricular outflow tract: outcomes to the intermediate term. Ann Thorac Surg. 2010;90(1):42-9.
108 Krasnoperov V, **Kumar SR**, Ley E, Li X, Scehnet J, Liu R, Zozulya S, Gill PS. Novel EphB4 monoclonal antibodies modulate angiogenesis and inhibit tumor growth. Am J Pathol. 2010;176(4):2029-38.
109 He S, **Kumar SR**, Zhou P, Krasnoperov V, Ryan SJ, Gill PS, Hinton DR. Soluble EphB4 inhibits PDGF-induced RPE migration in vitro. Invest Ophthalmol Vis Sci. 2010;51(1):543-52.

110 **Kumar SR**, Scehnet JS, Ley EJ, Singh J, Krasnoperov V, Liu R, Manchanda PK, Ladner RD, Hawes D, Weaver FA, Beart RW, Singh G, Nguyen C, Kahn M, Gill PS. Preferential induction of EphB4 over EphB2 and its implication in colorectal cancer progression. Cancer Res. 2009;69(10):3736-45.
111 Scehnet JS, Ley EJ, Krasnoperov V, Liu R, Manchanda PK, Sjoberg E, Kostecke AP, Gupta S, **Kumar SR**, Gill PS. The role of Ephs, Ephrins, and growth factors in Kaposi sarcoma and implications of EphrinB2 blockade. Blood. 2009;113(1):254-63.

112 Trindade A, **Kumar SR**, Scehnet JS, Lopes-da-Costa L, Becker J, Jiang W, Liu R, Gill PS, Duarte A. Overexpression of delta-like 4 induces arterialization and attenuates vessel formation in developing mouse embryos. Blood. 2008;112(5):1720-9.
113 Rowe VL, **Kumar SR**, Glass H, Hood DB, Weaver FA. Race independently impacts outcome of infrapopliteal bypass for symptomatic arterial insufficiency. Vasc Endovascular Surg. 2007;41(5):397-401.
114 Scehnet JS, Jiang W, **Kumar SR**, Krasnoperov V, Trindade A, Benedito R, Djokovic D, Borges C, Ley EJ, Duarte A, Gill PS. Inhibition of Dll4-mediated signaling induces proliferation of immature vessels and results in poor tissue perfusion. Blood. 2007;109(11):4753-60.
115 **Kumar SR**, Masood R, Spannuth WA, Singh J, Scehnet J, Kleiber G, Jennings N, Deavers M, Krasnoperov V, Dubeau L, Weaver FA, Sood AK, Gill PS. The receptor tyrosine kinase EphB4 is overexpressed in ovarian cancer, provides survival signals and predicts poor outcome. Br J Cancer. 2007;96(7):1083-91.
116 Chao A, Major K, **Kumar SR**, Patel K, Trujillo I, Hood DB, Rowe VL, Weaver FA. Carbon dioxide digital subtraction angiography-assisted endovascular aortic aneurysm repair in the azotemic patient. J Vasc Surg. 2007 Mar;45(3):451-8; discussion 458-60.
117 Shah H, **Kumar SR**, Major K, Hood D, Rowe V, Weaver FA. Technology penetration of endovascular aortic aneurysm repair in southern California. Ann Vasc Surg. 2006;20(6):796-802.
118 Masood R*, **Kumar SR***, Sinha UK, Crowe DL, Krasnoperov V, Reddy RK, Zozulya S, Singh J, Xia G, Broek D, Schönthal AH, Gill PS. EphB4 provides survival advantage to squamous cell carcinoma of the head and neck. Int J Cancer. 2006;119(6):1236-48
119 **Kumar SR**, Singh J, Xia G, Krasnoperov V, Hassanieh L, Ley EJ, Scehnet J, Kumar NG, Hawes D, Press MF, Weaver FA, Gill PS. Receptor tyrosine kinase EphB4 is a survival factor in breast cancer. Am J Pathol. 2006;169(1):279-93
120 Xia G, **Kumar SR**, Hawes D, Cai J, Hassanieh L, Groshen S, Zhu S, Masood R, Quinn DI, Broek D, Stein JP, Gill PS. Expression and significance of vascular endothelial growth factor receptor 2 in bladder cancer. J Urol. 2006;175(4):1245-52.
121 Kertesz N, Krasnoperov V, Reddy R, Leshanski L, **Kumar SR**, Zozulya S, Gill PS. The soluble extracellular domain of EphB4 (sEphB4) antagonizes EphB4-EphrinB2 interaction, modulates angiogenesis, and inhibits tumor growth. Blood. 2006;107(6):2330-8.
122 Xia G, **Kumar SR**, Stein JP, Singh J, Krasnoperov V, Zhu S, Hassanieh L, Smith DL, Buscarini M, Broek D, Quinn DI, Weaver FA, Gill PS. EphB4 receptor tyrosine kinase is expressed in bladder cancer and provides signals for cell survival. Oncogene. 2006;25(5):769-80.
123 He S, Ding Y, Zhou J, Krasnoperov V, Zozulya S, **Kumar SR**, Ryan SJ, Gill PS, Hinton DR. Soluble EphB4 regulates choroidal endothelial cell function and inhibits laser-induced choroidal neovascularization. Invest Ophthalmol Vis Sci. 2005;46(12):4772-9.
124 Xia G, **Kumar SR**, Masood R, Koss M, Templeman C, Quinn D, Zhu S, Reddy R, Krasnoperov V, Gill PS. Up-regulation of EphB4 in mesothelioma and its biological significance. Clin Cancer Res. 2005;11(12):4305-15.
125 Xia G, **Kumar SR**, Masood R, Zhu S, Reddy R, Krasnoperov V, Quinn DI, Henshall SM, Sutherland RL, Pinski JK, Daneshmand S, Buscarini M, Stein JP, Zhong C, Broek D, Roy-Burman P, Gill PS. EphB4 expression and biological significance in prostate cancer. Cancer Res. 2005;65(11):4623-32.
126 Nathwani RA, **Kumar SR**, Reynolds TB, Kaplowitz N. Marked elevation in serum transaminases: an atypical presentation of choledocholithiasis. Am J Gastroenterol. 2005;100(2):295-8.

127 Weaver FA, **Kumar SR**, Yellin AE, Anderson S, Hood DB, Rowe VL, Kitridou RC, Kohl RD, Alexander J. Renal revascularization in Takayasu arteritis-induced renal artery stenosis. J Vasc Surg. 2004;39(4):749-57.

128 **Kumar SR**, Peyre CG, Sher LS. Immunosuppression. Seminars in Anesthesia, Perioperative Medicine and Pain 2004;23(3):12-22.

129 **Kumar SR**, Rowe VL, Petrone P, Kuncir EJ, Asensio JA. The vasculopathic patient: uncommon surgical emergencies. Emerg Med Clin North Am. 2003;21(4):803-15.

130 Deane R*, Du Yan S*, **Kumar SR***, LaRue B, Jovanovic S, Hogg E, Welch D, Manness L, Lin C, Yu J, Zhu H, Ghiso J, Frangione B, Stern A, Schmidt AM, Armstrong DL, Arnold B, Liliensiek B, Nawroth P, Hofman F, Kindy M, Stern D, Zlokovic B. RAGE mediates amyloid-beta peptide transport across the blood-brain barrier and accumulation in brain. Nat Med. 2003;9(7):907-13.

131 Yu H, **Kumar SR**, Tang L, Terramani TT, Rowe VL, Wang Y, Nathwani RA, Weaver FA, Eton D. Injury induced neointima formation and its inhibition by retrovirus-mediated transfer of nitride oxide synthase gene in an in-vitro human saphenous vein culture model. Atherosclerosis. 2002;161(1):113-22.

132 **Kumar SR**, Weaver FA, Yellin AE. Cervical vascular injuries: carotid and jugular venous injuries. Surg Clin North Am. 2001;81(6):1331-44

133 Shibata M, **Kumar SR**, Amar A, Fernandez JA, Hofman F, Griffin JH, Zlokovic BV. Anti-inflammatory, antithrombotic, and neuroprotective effects of activated protein C in a murine model of focal ischemic stroke. Circulation. 2001;103(13):1799-805.

134 Shibata M, Yamada S, **Kumar SR**, Calero M, Bading J, Frangione B, Holtzman DM, Miller CA, Strickland DK, Ghiso J, Zlokovic BV. Clearance of Alzheimer's amyloidβ(1-40) peptide from brain by LDL receptor-related protein-1 at the blood-brain barrier. J Clin Invest. 2000;106(12):1489-99.

135 Ninomia T, Wang L, **Kumar SR**, Kim A, Zlokovic BV. Brain injury and cerebrovascular fibrin deposition correlate with reduced antithrombotic brain capillary functions in a hypertensive stroke model. J Cereb Blood Flow Metab. 2000;20:998-1009.

136 **Kumar SR**, Zlokovic BV**.** Monoclonal Antibody Designated T2G1 Reacts With Human Fibrin -Chain but Not With the Corresponding Chain From Mouse Fibrin – Response. Arterioscler Thromb Vasc Biol 2000;20:1848-9.

137 Yu H, Eton D, Wang Y, **Kumar SR**, Tang L, Terramani TT, Benedict C, Hung G, Anderson WF. High efficiency in vitro gene transfer into vascular tissues using a pseudotyped retroviral vector without pseudotransduction. Gene Ther. 1999;6(11):1876-83.

138 Kaul S, **Kumar SR**, Misra KP. Heart disease in diabetes mellitus. J of Int Med of Ind 1998;9(3):52-6.

139 **Kumar SR**, Javid M, Misra KP, Kumar MV. Complete common AV canal with long survival. Indian Heart J. 1997;49(4):421-2.

140 Javid M, **Kumar SR**, Kumar MV, Misra KP. Mycotic pulmonary artery aneurysm complicating bacterial endocarditis. Indian Heart J. 1996;48(4):403-4.

REFERRED REVIEWS, CHAPTERS, AND EDITORIALS:

Updated 07/2023

1. Kaul S, **Kumar SR**, Misra KP. Antioxidants in coronary artery disease: Current Status. In Manoria, ed. Millennium update in cardiology. 1st ed. Bhopal, 1999:442-64.
2. **Kumar SR**, Misra KP. Beta-blockers in hypertension. In Paul Anand, ed. Hypertension – An international monograph 2000. 1st ed. IJCP group of publications, Mumbai, 1999:178-96.
3. **Kumar SR**, Weaver FA. Carotid artery injuries. In Demetriades and Asensio, eds. Trauma Management. 1st ed. Landes Bioscience, Texas, 2000:135-40.
4. **Kumar SR**, Weaver FA. Current Diagnostic Techniques in Vascular Trauma. In: Yao, Pearce, eds. Modern Vascular Surgery. 1st ed. McGraw-Hill Inc, PA, 2000:381-92.
5. **Kumar SR**, Weaver FA. Traumatismes de l'Artère Vertèbrale (in French). In Vertebral Artery. 1st ed. Paris, 2001: 195-201.
6. **Kumar SR**, Rowe VL, Weaver FA. Management of Vascular Access Complication. In: Yao, Pearce, eds. Current Techniques in Vascular Surgery. 1st ed. McGraw-Hill Inc, PA, 2001:339-54.
7. **Kumar SR**, Hood DB, Weaver FA. Extremity Vascular Trauma. In Cronenwett, Rutherford, eds. Decision making in Vascular Surgery. 1st ed. W B Saunders Company, PA, 2001:332-5.
8. **Kumar SR**, Weaver FA. Vascular Injuries of the Neck. In Andros, Barros D'Sa, eds. Emergency Vascular and Endovascular Surgical Practice. 2nd ed. Arnold Publishers, London, 2005: 417-26.
9. **Kumar SR**. Principles of molecular biology for cancer surgeons. In Silberman and Silberman, eds. Principles and Practice of Surgical Oncology. 2nd ed. Lippincott Williams and Wilkins, 2009.
10. Baker CJ, **Kumar SR**, Starnes VA. Ross Procedure. In Selke, ed. An Atlas of Cardiac Surgery. 2nd ed. W B Saunders Company, PA, 2017:312-5.
11. Wells, WJ, Wiggins, LM, **Kumar SR**. Left Ventricular Outflow Tract Obstruction. In STS e-book. 1st ed. 2018: 627-34.
12. Gray, WH, Starnes VA, **Kumar SR**. The Ross Procedure. In STS e-book. 1st ed. 2018: 429-43.
13. Mallios, DM**, Kumar SR.** Pediatric Surgery for Unroofed Coronary Sinus**.** In Medscape. Updated Aug 2018.
14. **Kumar SR**, Gruber, PG**.** Cardiac Development**.** In Mavroudis and Backer, Eds. 2nd Ed. 2018.

BOOKS, MONOGRAPHS, AND TEXT BOOKS:

1. Co-editor of: The joy of ECG – A clinico-electrocardiograhic correlation authored by Dr. K P Misra for its second, third, fourth and fifth editions, Madras, 1997, Arati P Misra, Madras.
2. Misra KP, **Kumar SR**, Kaul S. A Primer of ECG – A simple and deductive approach, 2nd International edition (a textbook on the basic principles and practices of ECG), Madras, 1998, Arati P Misra, Madras.

ABSTRACTS AND PRESENTATIONS:

ABSTRACT

Updated 07/2023

1. **Kumar SR**, L K Prem Kumar, S Ramya, P M Raman. Health care at the doorstep – a population survey of awareness and reach of medical facilities. Presented at the Conference for furtherance of Medicare, Institute of Community Medicine, Madras, 1995.
2. **Kumar SR**. Nulliparous uterine prolapse – principles and practice. Presented at the Workshop and Symposium on uterine prolapse. Institute of Obstetrics and Gynecology, Madras, 1996.
3. **Kumar SR**. Management of asthmatic bronchitis in children – current guidelines. Presented at the Symposium on Asthma in Children, Madras, 1997.
4. **Kumar SR**. Tetanus prophylaxis – Current recommendations and practice. Presented at the Focused Overviews, Reviews and Updates in Medicine – 98 (FORUM), Madras, 1998.
5. S Rathinam, S Bhargavi, **Kumar SR**, B Sankar, K Subbu. Traumatic diaphragmatic injury. Presented at the Conference of the Association of Surgeons of India, Tamil Nadu chapter, Madurai, 1997.
6. R Parivalavan, **Kumar SR**. Laparoscopic appendectomy versus open appendectomy. Presented at the Conference of the Endoscopic gastroenterologists of India, Hyderabad, 1998.
7. **Kumar SR**, R Parivalavan, G Kamat, A Rajagopalan. Combined inguinal hernia repair and trans-urethral prostatic resection – feasibility and advantages: a comparative analysis. Presented at the Conference of the Association of Surgeons of India, Madras Chapter, Madras, 1998.
8. M Shibata, **Kumar SR**, A Amar, J A Fernandez, J Griffin, B V Zlokovic. Neuroprotective efficacy of Activated Protein C in a murine model of focal cerebral ischemia. Presented at the American Association of Neurological Surgeons' Conference, New Orleans, Feb 2000.
9. **Kumar SR**, M Shibata, A Amar, J A Fernandez, J Griffin, B V Zlokovic. Anti-thrombotic, Anti-inflammatory and Neuroprotective Effects of Activated Protein C in a Murine Model of Focal Ischemic Stroke with Cerebrovascular Thrombosis. Presented at the Young Investigators' Forum of the American Heart Association, San Diego, June 2000
10. E Hogg, **Kumar SR**, D M Holtzman, J Ghiso, B Frangione, L Maness, S Jovanovic, B V Zlokovic. A model of brain arterial infusion in mice for measurements of cerebrovascular functions: application to amyloid 1-40 peptide transport in apolipoprotein E knockout mice. Annual Meeting of the Society of Neuroscience, New Orleans, November 2000.
11. B V Zlokovic, M Shibata, **Kumar SR**, S Yamada, B Frangione, D M Holtzman, J Ghiso, C A Miller, M Calero. Role of low-density lipoprotein receptor related protein-1 in vascular clearance of amyloid 1-40 peptide from brain. Annual Meeting of the Society of Neuroscience, New Orleans, November 2000.
12. M Shibata, **Kumar SR**, A Amar, J A Fernandez, S Ferris, J Griffin, B V Zlokovic. Activated protein C protects in a murine model of focal ischemic stroke. Annual Meeting of the Society of Neuroscience, New Orleans, November 2000.
13. **Kumar SR**, W Miao, J Ghiso, B Frangione, F Hofman, S D Yan, A M Schmidt, D Stern, B V Zlokovic. RAGE at the blood-brain barrier mediates neurovascular dysfunction caused by amyloid 1-40 peptide. Annual Meeting of the Society of Neuroscience, New Orleans, November 2000.
14. **Kumar SR,** R Mateo, Y Genyk, N Jabbour, R Selby, L Sher. Thrombotic thrombocytopenic purpura in liver transplant recipients. Presented at the 32nd annual meeting of the Society of Critical Care Medicine, San Antonio, January 2003.

15. Kohl. Renal Revascularization for Takayasu's Arteritis Induced Renal Artery Stenosis. Presented at the 18th Annual Meeting of the Western Vascular Society, Big Island, October 2003 – won the best regional abstract award.

16. **Kumar SR**, F A Weaver, A E Yellin, S Anderson, D B Hood, R C Kitridou, V L Rowe, R D Kohl. Renal Revascularization for Takayasu's Arteritis Induced Renal Artery Stenosis. Presented at the 18th Annual Meeting of the Western Vascular Society, Big Island, October 2003 – won the best regional abstract award.

17. **Kumar SR**, P S Gill. Eph-Ephrin signaling in malignancy. Presented at the Annual Retreat, Department of Pathology, University of Southern California, Oxnard, CA, 2005. Won best abstract award.

18. **Kumar SR**, V Krasnoperov, P S Gill, F A Weaver. EphB4-EphrinB2 interaction is required for angiogenesis at sites of neovascularization in the adult. Presented at the Vascular Biology Meeting, Rochester, May 2006 – won best presentation award.

19. **Kumar SR**, V L Rowe, H Glass, D B Hood, F A Weaver. Race independently impacts outcome of infra-popliteal bypass for symptomatic arterial insufficiency. Presented at the Annual Meeting of the Western Vascular Society, San Diego, September 2006

20. **Kumar SR**, L Hassanieh, J Singh, P S Gill, F A Weaver. Delta-like ligand-4 induces angiogenesis at sites of neovascularization in the adult. Presented at the Surgical Forum at the 92nd Annual Clinical Congress of American College of Surgeons, Chicago, October 2006**.**

21. Wiggins L, **Kumar SR**, Starnes VA, Wells WJ. Arterioplasty for Right Ventricular Outflow Tract Obstruction Following Arterial Switch is a Durable Procedure. Southern Thoracic Surgical Association 61st Annual Meeting, Tucson, Arizona, November 2014.

22. Bansal N, **Kumar SR**, Baker CJ, Lemus R, Wells WJ, Starnes VA. Age-related outcomes of the Ross procedure over twenty years. Southern Thoracic Surgical Association 61st Annual Meeting, Tucson, Arizona, November 2014.

23. **Kumar SR,** Escobar A, Starnes VA, Wells WJ. Outcomes of ECMO in Children with Single Ventricle Physiology. Southern Thoracic Surgical Association 61st Annual Meeting, Tucson, Arizona, November 2014.

24. Liu J, Ma B, Yen H, Gill PS, Sucov HM, **Kumar SR**. Endocardial EphB4 signaling regulates Neuregulin-1 expression and is critically required for ventricular myocardial development. American Heart Association Scientific Sessions, Chicago, November 2014.

25. **Kumar SR**, Cheng A, Ramachandran S, Wong P, Nigro JJ, Wells WJ, Starnes VA. Aortic Valve Annulus is the Best Predictor of LVOT Re-intervention following Biventricular Repair of Interrupted arch/Ventricular Septal Defect. Society of Throacic Surgeons, Phoenix, AZ, January 2016.

26. **Kumar SR,** Bansal N, Wells WJ, Starnes VA. Outcomes of re-intervention on the autograft follov Ross procedure. Southern Thoracic Surgical Association 62nd Annual Meeting, Orlando, FL, Nove 2015.

27. **Kumar SR,** Kung G, Noh N, Castillo N, Fagan B, Wells, WJ, Starnes VA. Single Ventricle Outcomes Following Neonatal Palliation of Severe Ebstein's Anomaly with Modified Starnes Procedure. American Heart Association Scientific Sessions, Florida, November 2015.

Updated 07/2023

MEDIA AND TELEVISION APPEARANCES:

1. CBSN National news – New stem cell technique tested for babies with life-threatening heart condition – June 13, 2018
2. ABC7 Eyewitness News - CHLA launches new stem cell trial for babies born with half a heart – Feb 5, 2018
3. LA Business Journal - Children's Hospital L.A. Joins Study Using Stem Cells to Treat Rare Heart Defect in Kids – Feb 5, 2018
4. Drug Development Technology - Umbilical cord stem cells could treat newborn babies with heart defects – Feb 7, 2018
5. Rare Disease Report - CHLA Takes On Trial of Potential Stem Cell Procedure in Treating HLHS – Feb 6, 2018.
6. HSC News - CHLA joins national consortium to study treatments for rare cardiac defect – Feb 6, 2018
7. US News and World Report – Safety in Numbers – June 21, 2017
8. The Chronicle - Siemens honors senior's research – December 18, 2013

MISCELLANY:

1. Avid interest in music, mainly classical Eastern. Professional vocal performer.
2. Distinguished **orator**, participated, won and conducted many contests at various levels.
3. Adept in many languages including English and Sanskrit, where I have authored textbooks and plays for school students.