

CURRICULUM VITAE

NAME: Richard D. Mainwaring, M.D.

ADDRESS: Stanford University Medical Center
Falk Cardiovascular Research Center
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UNDERGRADUATE EDUCATION: Duke University, BA 9/74-5/78

MEDICAL EDUCATION: Duke University 7/78-6/82
School of Medicine, MD

SURGICAL EDUCATION: University of Virginia Medical Center 7/82-6/83
Intern

University of Virginia Medical Center 7/83-6/84
Resident

University of Virginia Medical Center 7/84-6/85
Resident in Surgical Research

University of Virginia Medical Center 7/85-6/87
Resident

University of Virginia Medical Center 7/87-6/88
Chief Resident

University of Pennsylvania 7/88-6/89
Cardiothoracic Fellow

University of Pennsylvania 7/89-6/90
Cardiothoracic Surgery – Chief Resident

CURRENT POSITION: Clinical Professor of Surgery 9/13-present
Stanford University School of Medicine
Department of Cardiothoracic Surgery

Clinical Associate Professor 8/03-8/13
Stanford University School of Medicine
Department of Cardiothoracic Surgery

Director, Pediatric Cardiac Surgical Fellowship Program 3/11-present

Lucile Packard Children's Hospital
Stanford University School of Medicine

Chairperson, Congenital Program Directors' Committee 8/14-5/16
to develop the Congenital Cardiac Surgery In-Service Exam

PAST POSITIONS:

Director, Pediatric Cardiac Surgery 8/03-6/09
Sutter Memorial Hospital
Sacramento, California

Associate Professor 4/01-2/03
University of Tennessee College of Medicine
Department of Surgery

Division of Cardiovascular Surgery 1/98-4/01
A. I. DuPont Hospital for Children
Wilmington, Delaware

Chief, Division of Cardiovascular Surgery 1996-97
Children's Hospital and Health Center of San Diego

Senior Staff 1994-97
Children's Hospital and Health Center of San Diego

Associate Staff 1990-94
Children's Hospital and Health Center of San Diego

RESEARCH EXPERIENCE:

Duke University School of Medicine 1982
Research Associate

University of Virginia School of Medicine 1984-85
Postdoctoral Fellow

MEMBERSHIPS:

Association of Academic Surgery 1985
Muller Surgical Society 1988
American Medical Association 1990
California Medical Association 1990
American College of Surgeons, Fellow 1994
Society of Thoracic Surgeons 1994
Western Thoracic Surgical Association 1996
American Association for Thoracic Surgery 1998
Southern Thoracic Surgical Association 2002
Thoracic Surgical Directors Association 2012
Congenital Heart Surgeons' Society 2016

<u>CERTIFICATION:</u>	American Board of Surgery (#35715)	1990
	American Board of Thoracic Surgery (#5246)	1992
<u>RECERTIFICATION:</u>	American Board of Thoracic Surgery	2002
	American Board of Thoracic Surgery	2011
<u>EDITORIAL BOARD:</u>	Cardiology in the Young	1996-2006
	World Journal of Pediatric and Congenital Heart Surgery	2014-
<u>GRANTS:</u>	1) “The Role of Adenosine in Regulating Coronary Blood Flow in the Newborn Lamb.” Individual National Research Service Award (NRSA)	1983-84
	2) “Endocrinologic Changes Following Open-Heart Surgery in the Newborn.” Intramural Research Grant – Children’s Hospital and Health Center of San Diego	1992
	3) “Pharmacokinetic Evaluation of Triiodothyronine Supplementation Following the Fontan Procedure.” Food and Drug Administration	1995-98
	4) “Changes in Serum Thyroid Hormone Levels Following Stage I Reconstruction for Hypoplastic Left Heart Syndrome.” Intramural Research Grants – A. I. DuPont Hospital for Children	1999
	5) “Tissue Engineering of Implantable Cardiac Constructs.” Nemours Research Programs – co investigator	1999
	6) “Brain Natriuretic Peptide Levels Before and After Ventricular Septal Defect Repair.” Sutter Institute for Medical Research	2005
	7) “Triostat Supplementation in Children during Cardiopulmonary Bypass.” NIH (IND55367) Multi-institutional Trial	2006
	8) “TRICC-2: Phase 3 T3 Supplementation for Infants following cardiopulmonary bypass (IND 55367).”	2015
<u>AWARDS:</u>	1) Individual National Research Service Award (NRSA)	1983
	2) Bigger-Lehman Award for Resident Research. “The Role of Adenosine in Regulating Coronary Blood Flow In the Newborn Lamb.”	1985

- 3) Intramural Research Grant – Children’s Hospital “Endocrinologic Changes Following Open-Heart Surgery in the Newborn.” 1992
- 4) Food and Drug Administration Grant. “Pharmacokinetic Evaluation of Triiodothyronine Supplementation Following the Fontan Procedure. 1995
- 5) Winner of the George R. Daicoff award for the best congenital paper at the 2016 Southern Thoracic Surgical Association meeting and winner of the best overall paper at the 2016 STSA meeting. 2016

I. Refereed Journals

- 1) Mentzer RM, Ely SW, Lasley RD, Mainwaring RD, Wright EM, and Berne RM: Hormonal Role of Adenosine in Maintaining Patency of the Ductus Arteriosus in Fetal Lambs. *Ann Surg*, 1985; 202(2): 223-230
- 2) Mainwaring RD, Mentzer RM, Ely SW, Rubio R, and Berne RM: The Role of Adenosine in the Regulation of Coronary Blood Flow in Newborn Lambs. *Surgery*, 1985; 98(3): 540-546
- 3) Anderson PAW, Mainwaring RD, Glick KL, and Killiam AP: Left Ventricular Output and Stroke Volume in the In Utero Fetal Lamb: The effects of heart Rate. *J Physiol*, 1986; 375: 557-573
- 4) Mainwaring RD, and Mentzer RM: Effects of Dipyridamole on Myocardial Glucose Uptake in the Newborn Lamb. *J Surg Res*, 1986; 40: 528-533
- 5) Anderson PAW, Mainwaring RD, Glick KL, and Killiam AP: Effect of Heart Rate on Right Ventricular Output in the Fetal Lamb. *J Physiol*, 1987; 387: 297-316
- 6) Mainwaring RD, Lasley RD, Rubio R, Wyatt DA, and Mentzer RM: Adenosine Stimulates Glucose Uptake in the Isolated Rat Heart. *Surgery*, 1988; 445-453
- 7) Mainwaring RD, Ely, SW, and Mentzer RM: Myocardial Reactive Hyperemia in the Newborn. *J Surg Res*, 1988; 44: 603-608
- 8) Tatu WF, Holmes WS, Black WC, Mainwaring RD, and Carter T: Aggressive Angiomyxoma with Gastrointestinal Communication: A Case report. *J CT*, 1988; 12: 32-35
- 9) Mainwaring RD, Kern J, Schenk WG III, and Rudolf LE: Differentiating Pancreatic Pseudocyst and Pancreatic Necrosis Using Computerized Tomography. *Annals of Surg*, 1989; 209(5): 562-568
- 10) Wyatt DA, Ely SW, Lasley RD, Walsh RD, Mainwaring RD, Berne RM, Mentzer RM: Purine-enriched Asanguineous Cardioplegia Retards Adenosine Triphosphate

- Degradation and Improves Post-ischemic Ventricular Function. *J Thorac Cardiovasc Surg*, 1989;97: 771-778
- 11) Mainwaring RD, Rivera J, and Wilson W: Synchronous Hepatocellular Carcinoma and Adenocarcinoma of the Colon. *AM Surg*, 1989; 55(8): 528-532
 - 12) Anderson PAW, Fair EC, Killiam AP, Nasar R, Mainwaring RD, Rosemond RL, Whyte LM: The In Utero Left Ventricle of the Fetal Sheep: The effects of Isoprenaline. *J Physiol*, 1990; 430: 441-45
 - 13) Lamberti JJ, Mainwaring RD, Waldman JD, George L, Mathewson JW, Spicer RL, Kirkpatrick SE: The Damus-Fontan Procedure. *Ann Thorac Surg*, 1991; 52: 676-679
 - 14) Lamberti JJ, Mainwaring RD, Billman GF, Hopkins BA, George L, Kirkpatrick SE, Spicer RL: Cryo-preserved Homograft Valve in the Pulmonary Position. *J of Card Surg*, 1991; 6(4): 627-632
 - 15) Mainwaring RD, and Tribble C: The Cardiac Illness of General Robert E. Lee. *Surg Gynecology and Obstetrics*, 1992: 174: 237-244
 - 16) Mainwaring RD, Lamberti JJ, and Kirkpatrick SE: Omental Transfer for Treatment Of Mediastinitis in an Infant. *J of Card Surg*, 1992; 7(3): 269-274
 - 17) Mainwaring RD, Lamberti JJ, and Spicer RL: Management of Absent Pulmonary Valve Syndrome with Patent Ductus Arteriosus. *J Card Surg*, 1993; 8(2): 148-155
 - 18) Mainwaring RD, and Lamberti JJ: Pulmonary Atresia with Intact Ventricular Septum: Surgical approach based on ventricular size and coronary anatomy. *J Thorac Cardiovasc Surg*, 1993; 106: 733-738
 - 19) Lamberti JJ, Mainwaring RD, George L, and Oury JH: Management Systemic Atrioventricular Valve Regurgitation in Infants and Children. *J Card Surg*, 1993; 8(6): 612-621
 - 20) Mainwaring RD, Lamberti JJ, Rohrer C, and Winkler M: Neck Cannulation for the Repair of Thoracic Artery Aneurysms in the Infant. *J Card Surg*, 1993; 8(5): 541-545
 - 21) Mainwaring RD, Lamberti JJ, Moore JW, Billman GF, and Nelson JC: A Comparison of The Hormonal Response Following Bidirectional Glenn and Fontan Procedures. *Ann Thorac Surg*, 1994; 57: 59-64
 - 22) Terris MH, Mainwaring RD, and Pransky SM: Airway Compromise Secondary to Vascular Compression in a Neonate. *Int'l J Ped Otolaryngol*, 1994; 25: 193-197
 - 23) Mainwaring RD, Lamberti JJ, Billman GF, and Nelson JC: Suppression of the Pituitary-Thyroid Axis after Cardiopulmonary Bypass in the Neonate. *Ann Thorac Surg*, 1994; 58: 1078-1086

- 24) Mainwaring RD, Lamberti JJ, Carter TL, and Nelson JC: Reduction in Triiodothyronine Levels following Modified Fontan Procedure. J Card Surg, 1994; 9: 322-331
- 25) Subin K, Mainwaring RD, Lamberti JJ, Carter TL, and Billman G: Management of Mycotic Aneurysm following Repair of Corrected Transposition. J Card Surg, 1994; 9: 55-60
- 26) Carter TL, Mainwaring RD, and Lamberti JJ: The Damus-Kaye-Stansel Procedure: Mid-Term follow up and technical considerations. Ann Thorac Surg, 1994; 58: 1603-1608
- 27) Mainwaring RD, Lamberti JJ, Carter TL, Moore JW, and Nelson JC: Renin, Angiotensin II, and the Development of Effusions following Bidirectional Glenn And Fontan Procedures. J Card Surg, 1995; 10: 111-118
- 28) Moore JW, Spicer RL, Perry JC, Mathewson JW, Kirkpatrick SE, George L, Uzark K, Mainwaring RD, and Lamberti JJ: Percutaneous use of Stents to Correct Pulmonary Artery Stenosis in Infants and Young Children After Cavo-Pulmonary Anastomosis. AM H J, 1995; 130: 1245-1249
- 29) Mainwaring RD, and Lamberti JJ: Bidirectional Glenn: Is Accessory Pulmonary Blood Flow Good or Bad? Circulation, 1995;92 (Supplement II): II-294 to II-297
- 30) Lamberti JJ, Mainwaring RD, Spicer RL, Uzark K, and Moore JW: Factors Influencing Perioperative Morbidity During Palliation of the Uni-Ventricular Heart. Ann Thorac Surg, 1995; 60: S550-S553
- 31) Mainwaring RD, Nelson JC, and Lamberti JJ: Reply to the Editor with Regard to Suppression of the Pituitary-Thyroid Axis after Cardiopulmonary Bypass in the Neonate. Ann Thorac Surg, 1995; 60: 745-747
- 32) Mainwaring RD, Lamberti JJ, and Moore JW: The Bidirectional Glenn and Fontan Procedures: Integrated management of the Single Ventricle Patient. Cardiol Young 1996; 6: 198-207
- 33) Mainwaring RD, Lamberti JJ, Moore JW, Billman GF, Carter TL, and Nelson JC: Tetralogy of Fallot Repair Results in Activation of the Renin-Angiotensin-Aldosterone System. Eur Heart J, 1996; 17(9): 1421-1425
- 34) Mainwaring RD, Mirali-Akbar H, Lamberti JJ, and Moore JW: Secundum Type Atrial Septal Defects with Failure to Thrive in the First Year of Life. J Card Surg, 1996; 11: 116-120
- 35) Spicer RL, Uzark K, Moore JW, Mainwaring RD, and Lamberti JJ: Aortopulmonary Collateral Vessels and Prolonged Pleural Effusions after Modified Fontan Procedures. Am Heart J, 1996; 131: 1164-1168
- 36) Mainwaring RD, Lamberti JJ, Nelson JC, Billman GF, Carter TL Jr., and Schell K: Effects of Triiodothyronine Supplementation Following Modified Fontan Procedure.

Cardiol Young, 1997; 7: 194-200

- 37) Mainwaring RD, and Lamberti JJ: Mid-to-Long Term results of the Two Stage Approach for Type B Interrupted Aortic Arch and Ventricular Septal Defect. Ann Thorac Surg, 1998; 64: 1782-1786
- 38) Mainwaring RD, Lamberti JJ, and Hugli TE: Complement Activation and Cytokine Generation After Modified Fontan Procedure. Ann Thorac Surg, 1998; 65: 1715-1720
- 39) Uzark K, Lincoln A, Lamberti JJ, Mainwaring RD, Spicer RL, and Moore JW: Neurodevelopmental Outcomes in Children with Fontan Repair of Functional Single Ventricle. Pediatrics, 1998; 101: 630-633
- 40) Canty TG Sr., Mainwaring RD, Vecchione T, Lamberti JJ, Collins D, Lynch F, Mathewson J: Separation of Omphalopagus Twins: Unique Reconstruction Using Syngeneic Cryopreserved Tissue. J Pediatr Surg, 1998; 33: 750-753
- 41) Mainwaring RD, and Lamberti JJ: Extracardiac Conduit Fontan for Children with Heterotaxy and Functional Single Ventricle. Cardiol Young, 1998; 8: 479-485
- 42) Mainwaring RD, and Nelson JC: Reply to the Editor with regard to Effects of Triiodothyronine Supplementation Following Modified Fontan Procedure. Cardiol Young, 1998; 8: 139-140
- 43) Uzark K, Frederick C, Lamberti JJ, Worthen HM, Ogino MT, Mainwaring RD, and Moore JW: Changing Practice Patterns for Children with Heart Disease: A Clinical Pathway Approach. Am J Crit Care, 1998; 7: 101-105
- 44) Mainwaring RD, Lamberti JJ, Uzark K, Spicer RL, and Moore JW: Effect of Accessory Pulmonary Blood Flow on Survival Following the Bidirectional Glenn Procedure. Circulation, 1999; 100 (19 suppl): II151-II156
- 45) Mainwaring RD, and Lamberti JJ: Letter to the Editor with regard to The Real Fate of Pulmonary Arteries after Bidirectional Superior Vena Cavopulmonary Anastomosis: Is there a Need for Concern. Cardiol Young, 1999; 6: 659-662
- 46) Mainwaring RD: Invited Commentary with regard to Hemi-Fontan Procedure for Hypoplastic Left Heart Syndrome: Outcome and Suitability for Fontan. Ann Thorac Surg, 1999; 68: 1361-1368
(Commentary published on the STS website @ <http://www.ctsnet.org/forum/103/0/2583>)
- 47) Mainwaring RD, Caparelli E, Schell K, and Nelson JC: Pharmacokinetic Evaluation of Triiodothyronine Supplementation Following Modified Fontan Procedure. Circulation, 2000; 101: 1423-1429
- 48) Mainwaring RD, Healy RM, Conard K, and Reilly A: Shoulder Pain in a Child: A Case Presentation of Ganglioneuroblastoma. Del Med Jrl, 2000; 72(3): 123-125
- 49) Mainwaring RD, Healy RM, Murphy JD, Norwood WI Jr.: Norwood/Batista Operation

- For a Newborn with Dilated Myopathy of the Left Ventricle. *J Thorac Cardiovasc Surg*, 2000; 120: 612-615
- 50) Mainwaring RD, Healy RM, Meier FA, Nelson JC, Norwood WI Jr.: Reduction In Levels of Triiodothyronine Following the First Stage of the Norwood Reconstruction For Hypoplastic Left Heart Syndrome. *Cardiol Young*, 2001; 11: 295-300
 - 51) Mainwaring RD: Invited Commentary with regard to Early Experience with Extracardiac Fontan Operation. *Ann Thorac Surg*, 2001; 71: 76-77
 - 52) Mainwaring RD, and Nelson JC: Supplementation of Thyroid Hormone in Children Undergoing Cardiac Surgery. *Cardiol Young*, 2002; 12(3): 211-217
 - 53) Mainwaring RD, and Nelson JC: Letter to the Editor in response to Dr. Colan's letter Regarding "Reduction in Levels of Triiodothyronine Following the First Stage of the Norwood Reconstruction for Hypoplastic Left Heart Syndrome". *Cardiol Young*, 2002; 12(1): 84-85
 - 54) Mainwaring RD, and Riley HD Jr.: The Lexington Physicians of General Robert E. Lee Southern Medical Journal, 2005; 98(8): 800-804
 - 55) Petrossian E, Reddy VM, Collins KK, Culbertson CB, MacDonald MJ, Lamberti JJ, Reinhartz O, Mainwaring RD, Malhorta SP, Suleman S, and Hanley FL: The Extracardiac Conduit Fontan Operation Using Minimal Approach Extracorporeal Circulation: Early and Mid-term Outcomes. *J Thorac Cardiovasc Surg*, 2006; 132(5): 1054-1063
 - 56) Reinhartz O, Reddy VM, Petrossian E, Suleman S, Mainwaring RD, Rosenthal DN, Feinstein JA, Gulati R, and Hanley FL: Unifocalization of Major Aortopulmonary Collaterals in Single Ventricle Patients. *Ann Thorac Surg*, 2006; 82(3): 934-938
 - 57) Mainwaring RD, Parise C, Wright SB, Juris AL, Ahtel RA, and Fallah H: Brain Natriuretic Peptide Levels before and after Ventricular Septal Defect Repair. *Ann Thorac Surg*, 2007; 84: 2066-2069
 - 58) Wright, SB, and Mainwaring RD: Octreotide for Management of Chylothorax following Bidirectional Glenn in a Three-Month-Old Infant. *J Card Surg*, 2009; 24:216-218
 - 59) Jimenez D, and Mainwaring RD: Pentalogy of Cantrell: A rare congenital abnormality. *Journal for the American Academy of Physician's Assistants*, 2007; 20(11): 26-27
 - 60) Mainwaring RD, Reddy VM, Reinhartz O, Lamberti JJ, Jacobson J, Jimenez D, and Hanley, FL: Outcome Analysis for a Small, Start-up Congenital Heart Surgery Program. *J Card Surg*, 2008; 23(6): 622-626
 - 61) Mainwaring RD: Invited Commentary with regard to Surgical Repair of the Mitral Valve in Children with Dilated Cardiomyopathy and Mitral Regurgitation. *Ann Thorac Surg* 2008; 85: 2088-2089.
 - 63) Portman M, Mainwaring RD, Karl T, Patel H, Mott A, Hastings L: Triiodothyronine for

- Infants and Children Undergoing Cardiopulmonary Bypass (TRICC) Study: Safety and Efficacy. *Circulation* 2010; 122 (suppl 1) : 5224-33.
- 64) Mainwaring RD, Reddy VM, Wright SB: Double Orifice Tricuspid Valve in Association with Complete Atrioventricular Septal Defect. *Pediatr Cardiol* 2009; 30(4): 564
 - 65) Mainwaring RD, Jacobson JL, Reinhartz O, Gates RL: Unusual Manifestation of Vascular Rings. *J Card Surg* 2010; 25: 79-83.
 - 66) Mainwaring RD: Invited Commentary with regard to Blood Stream Infections Increased after Delayed Sternal Closure. *Ann Thorac Surg* 2011; 91: 797-8.
 - 67) Mainwaring RD, Reddy VM, Reinhartz O, Petrossian E, MacDonald M, Nasirov T, Miyake C, and Hanley FL: Anomalous Aortic Origin of a Coronary Artery: Surgical Results and Medium-term Follow-up in 50 Patients. *Ann Thorac Surg* 2011; 92: 691-7.
 - 68) Mainwaring RD, Reddy VM, Reinhartz O, Punn R, Tacy T, and Hanley FL: Surgical Results and Follow-up in Patients with Pulmonary Atresia and Major Aortopulmonary Collaterals in Association with Total Anomalous Pulmonary Venous Connection. *Ann Thorac Surg* 2011; 92: 1756-60.
 - 69) Mainwaring RD, Sheikh AY, Reddy VM, Punn R, and Hanley FL. Surgical Results in Patients with Pulmonary Atresia/ Major Aortopulmonary Collaterals and Alagille Syndrome. *Eur J Cardiothorac Surg* 2012 ; 42(2): 235-41.
 - 70) Mainwaring RD, Shillingford MS, Davies R, Koltai P, Navaratnam M, Reddy VM, and Hanley FL. Surgical Reconstruction of Tracheal Stenosis in Conjunction with Congenital Heart Defects. *Ann Thorac Surg* 2012; 93: 1266-73.
 - 71) Mainwaring RD, Pirolli T, Punn R, and Hanley FL. Late Repair of the Native Pulmonary Valve in Patients with Pulmonary Insufficiency Following Tetralogy of Fallot Repair. *Ann Thorac Surg* 2012; 93: 677-9.
 - 72) Mainwaring RD, Reddy VM, Perry SB, Peng L, and Hanley FL. Late Outcomes in Patients undergoing Aortopulmonary Window for Pulmonary Atresia/Stenosis and Major Aortopulmonary Collaterals. *Ann Thorac Surg* 2012; 94: 842-8.
 - 73) Monge M, Mainwaring RD, Sheikh AY, Punn R, Reddy VM, and Hanley FL. Surgical Reconstruction of Peripheral Pulmonary Artery Stenosis in Williams and Alagille Syndromes. *J Thorac Cardiovasc Surg* 2013; 145: 476-481.
 - 74) Mainwaring RD, Reddy VM, Peng L, Kuan C, Palmon M, and Hanley FL. Hemodynamic Assessment after Complete Repair of Pulmonary Atresia/ Major Aortopulmonary Collaterals. *Ann Thorac Surg* 2013; 95 (4): 1397-402.
 - 75) Mainwaring RD, Reddy VM, and Hanley FL. Surgical Reconstruction of Pulmonary Stenosis with Ventricular Septal Defect and Major Aortopulmonary Collaterals. *Ann Thorac Surg* 2013; 95 (4): 1417-21.

- 76) Mainwaring RD, Dimeling G, Punn R, and Hanley FL. Aortic Valve Disease in Association with Pulmonary Atresia, Ventricular Septal Defect, and Major Aortopulmonary Collaterals. *Ann Thorac Surg* 2013; 95: 2122-2125.
- 77) Mainwaring RD, Reddy VM, and Hanley FL. Completion of the Three Stage Fontan Pathway without Cardiopulmonary Bypass. *WJPCHS* 2014; 5(3): 427-433.
- 78) Muralidaran A, Mainwaring RD, Reddy VM, and Hanley FL. Prevalence of Anomalous Coronary Arteries in Pulmonary Atresia with Ventricular Septal Defect and Major Aortopulmonary Collaterals. *JACC* 2013; 62(12): 1127-1128.
- 79) Nasirov T, Mainwaring RD, Reddy VM, Sleasman JR, Margetson T, and Hanley FL. Innominate Artery Cannulation and Antegrade Cerebral Perfusion for Aortic Arch Reconstruction in Infants and Children. *WJPCHS* 2013; 4 (4): 356-361.
- 80) Watanabe N, Mainwaring RD, Reddy VM, and Hanley FL. Early Complete Repair of Pulmonary Atresia with Ventricular Septal Defect and Major Aortopulmonary Collaterals. *Ann Thor Surg* 2014; 97: 909-915.
- 81) Mainwaring RD, Reddy VM, Reinhartz O, Petrossian E, and Hanley FL. Surgical Repair of Anomalous Aortic Origin of a Coronary Artery. *EJCTS* 2014; 46 (1): 20-26.
- 82) Chiu P, Schaffer JM, Sheikh AY, Lee PH, Scoville D, Ha R, Reinhartz O, Mainwaring RD, and Reitz BA. Elevated PVRI does not predict Postoperative Mortality in Pediatric Heart Transplantation: A retrospective analysis of the UNOS database. *Pediatric Transplantation* 2015;
- 83) Mainwaring RD and Hanley FL. Double Switch with Hemi-Mustard and Bi-directional Glenn procedure for “Anatomical” repair of Corrected Transposition. *Operative Techniques in Thoracic and Cardiovascular Surgery* 2013; 18 (3): 171-189.
- 84) Carrillo S, Mainwaring RD, Schaffer J, Wright G, Maeda K, Hanley FL, and Reddy VM. Contemporaneous Comparison of the Yasui and Norwood Procedures at a Single Institution. *J Thorac Cardiovasc Surg* 2015; 149 (2): 508-514.
- 85) Poynter JA, Williams WG, McIntyre S, Brothers JA, Jacobs ML, and the Congenital Heart Surgeons Society AAOCA Working Group. Anomalous Aortic Origin of a Coronary Artery: A Report from the Congenital Heart Surgeons Society Registry. *WJPCHS* 2014; 5 (1): 22-30.
- 86) Poynter JA and the Congenital Heart Surgeons Society AAOCA Working Group. Repair of Anomalous Aortic Origin of a Coronary in 113 Patients: A Congenital Heart Surgeons’ Society Report. *WJPCHS* 2014; 5 (4): 507-14.
- 87) Watanabe N, Mainwaring RD, Carrillo SA, Lui G, Reddy VM, and Hanley FL. Left Ventricular Re-training and Late Arterial Switch for D-Transposition of the Great Arteries. *Ann Thorac Surg* 2015; 99 (5): 1655-1663.
- 88) Mainwaring RD, Patrick WL, Punn R, Palmon M, Reddy VM, and Hanley FL. Fate of RV to PA Conduits Following Complete Repair of Pulmonary Atresia with Major Aortopulmonary Collaterals. *Ann Thorac Surg* 2015; 99 (5): 1685-1691.

- 89) Carrillo SA, Mainwaring RD, Patrick WL, Bauser-Heaton H, Peng L, Reddy VM, and Hanley FL. Surgical Repair of Pulmonary Atresia/Ventricular Septal Defect/Major Aortopulmonary Collaterals with absent Intra-pericardial Pulmonary Arteries. *Ann Thorac Surg* 2015; 100: 606-14.
- 90) Patrick WL, Mainwaring MD, Carrillo SA, Petrossian E, Ma M, Reinhartz O, Reddy VM, and Hanley FL. Anatomic Factors Associated with Truncal Valve Dysfunction and the Need for Truncal Valve Repair. *WJPCHS* 2016; 7 (1): 9-15.
- 91) Zeigler S, Mainwaring RD, Punn R, and Hanley FL. Double Switch with Hemi-Mustard and Bi-directional Glenn in the setting of Criss-Cross Heart. *Ann Thorac Surg* 2016; 101 (3): 1208-10.
- 92) Said SM, Mainwaring RD, Ma M, Tacy TA, and Hanley FL. Pulmonary Valve Repair for Patients with Acquired Pulmonary Valve Insufficiency. *Ann Thorac Surg* 2016; 101 (6): 2294-2301.
- 93) Mainwaring RD, Murphy DJ, Rogers IS, Chan FP, Petrossian E, Palmon M, and Hanley FL. Surgical Repair of 115 Patients with Anomalous Aortic Origin of a Coronary Artery. *WJPCHS* 2016; 7: 353-59.
- 94) Mainwaring RD, Patrick WL, Carrillo SA, Muralidaran A, Ibrahimiyeh AN, and Hanley FL. Prevalence and Anatomy of Retro-esophageal Major Aortopulmonary Collateral Arteries. *Ann Thorac Surg* 2016; 102 (3): 877-82.
- 95) Ibrahimiyeh AN, Mainwaring RD, Patrick WL, Downey L, Yarlagadda V, and Hanley FL. Left Ventricular re-training and Double Switch for Congenitally Corrected Transposition of the Great Arteries. *WJPCHS* 2017; 8 (2): 203-209.
- 96) Mainwaring RD, Ibrahimiyeh AN, and Hanley FL. Surgical Technique for Reconstruction of Peripheral Pulmonary Artery Stenosis and other Complex Peripheral Reconstructions. *Ann Thorac Surg* 2016; 102 (2): e181-183.
- 97) Patrick WL, Mainwaring RD, Reinhartz O, Punn R, Tacy T, and Hanley FL. Major Aortopulmonary Collateral Arteries in Patients with Anatomy other than Pulmonary Atresia with Ventricular Septal Defect. *Ann Thorac Surg* 2017; 104 (3): 907-16.
- 98) Mainwaring RD and Hanley FL. Surgical Reconstruction of Peripheral Pulmonary Artery Stenosis. *Seminars in Thoracic and Cardiovascular Surgery* 2017; 29 (3): 198-205.
- 99) Mainwaring RD, Patrick WL, Ibrahimiyeh AN, Watanabe N, Lui G, and Hanley FL. An analysis of Left Ventricular Re-training in Patients with D- and L- Transposition. *Ann Thorac Surg* 2018; 105 (3): 823-9.
- 100) Mainwaring RD and Hanley FL. How I Teach it: Repair of Tetralogy of Fallot. *Ann Thorac Surg* 2016; 102 (6): 1776-81.

- 101) Arunamata A, Balasubramanian S, Mainwaring RD, Maeda K, and Tierney ESS. Right-Dominant Unbalanced Atrioventricular Septal Defect: Echocardiography in Surgical Decision-Making. *J Am Soc Echocardiography* 2017; 30(3): 216-26.
- 102) Mainwaring RD, Patrick WL, Roth S, Komra K, Wise-Faberowski L, Palmon M, and Hanley FL. Surgical Algorithm and Results in Pulmonary Atresia with Ventricular Septal Defect and Major Aortopulmonary Collateral Arteries. *J Thorac Cardiovasc Surg* 2018; 156 (3): 1194-1204.
- 103) Greene CL, Mainwaring RD, Sidell D, Yarlagadda V, Patrick WL, and Hanley FL. Impact of Phrenic Nerve Palsy and the Need for Diaphragm Plication following surgery for Pulmonary Atresia with Ventricular Septal Defect and Major Aortopulmonary Collaterals. *Seminars in Thoracic Cardiovascular Surgery* 2018; 30 (3): 318-24.
- 104) Mainwaring RD, Patrick WL, Ma M, and Hanley FL. An Analysis of patients requiring unifocalization revision following midline unifocalization for pulmonary atresia with ventricular septal defect and major aortopulmonary collaterals. *Eur J Cardiothorac Surg* 2018; 54 (1): 63-70.
- 105) Ma M, Mainwaring RD, and Hanley FL. Comprehensive management of major aortopulmonary collaterals in the repair of tetralogy of Fallot. *Seminars in Thoracic and Cardiovascular Surgery* 2018; 21: 75-82.
- 106) Mainwaring RD, Rosenblatt TR, Patrick WL, Ma M, Peng L, and Hanley FL. Surgical results for patients with pulmonary atresia and a ductus arteriosus or hemi-truncus to one lung and major aortopulmonary collateral arteries to the contralateral lung. *Ann Thorac Surg* 2018; 106 (2): 568-74.
- 107) Mainwaring RD. “Cui Periculum”—Who is at Risk? Invited Commentary. *J Thorac Cardiovasc Surg* 2018; 155 (1): 322-4.
- 108) Mainwaring RD, Patrick WL, Rosenblatt TR, Ma M, Kamra K, Arunamata A, Hanley FL. Surgical Results of Unifocalization Revision. Accepted for publication in *J Thorac Cardiovasc Surg*.
- 109) Mainwaring RD, Patrick WL, Rosenblatt TR, Nasirov T, Kamra K, and Hanley FL. Analysis of achieving an “ideal outcome” following midline unifocalization in pulmonary atresia with ventricular septal defect and major aortopulmonary collateral arteries. *Asian Cardiovasc Thorac Ann* 2019; 27 (1): 11-17.
- 110) Quinonez ZA, Downey L, Abbasi RK, Kuan C, Asija R, McElhinney DB, Hanley FL, Mainwaring RD, and Wise-Faberowski L. Anesthetic management during surgery for tetralogy of Fallot with pulmonary atresia and major aortopulmonary collateral arteries. *WJPCHS* 2018; 9 (2): 236-41.
- 111) Mainwaring RD, Rosenblatt TR, Margetson TD, Ma M, and Hanley FL. Measurement of residual collateral flow during repair of pulmonary atresia with ventricular septal defect and major aortopulmonary collateral arteries. Accepted for publication in *Ann Thorac Surg*.

- 112) Mainwaring RD, Patrick WL, Chan F, Rosenblatt TR, Ma M, and Hanley FL. Left ventricular retraining in corrected transposition: relationship between left ventricular pressure and mass. In press
- 113) Mainwaring RD, Patrick WL, and Hanley FL. Surgical treatment of pulmonary atresia with ventricular septal defect and major aortopulmonary collateral arteries. Submitted to Seminars in Thoracic and Cardiovascular Surgery.
- 114) Greene CL, Mainwaring RD, Sidell D, and Hanley FL. A novel approach to the surgical treatment of absent pulmonary valve syndrome with severe airway compression. Submitted to WJPCHS.
- 115) Mainwaring RD, Rosenblatt TR, Lui GK, Ma M, and Hanley FL. Surgical treatment of Ebstein's anomaly of the tricuspid valve using a bicuspidization approach. Submitted to Ann Thorac Surg.
- 116) Mainwaring RD and Hanley FL. The Earth is Round!--Letter to the Editor, Accepted for publication in J Thorac Cardiovasc Surg.
- 117) Collins RT, Mainwaring RD, McMillen K, and Hanley FL. Outcomes of pulmonary artery reconstruction in Williams syndrome. Accepted for publication in Ann Thorac Surg.
- 118) Mainwaring RD and Hanley FL. Surgical repair of anomalous left main coronary artery with an intraconal course. Submitted to Congenital Heart Disease.
- 119) Margetson TD, Sleasman J, Kollmann S, McCarthy PJ, Jahadi O, Sheff D, Shuttleworth P, Mainwaring RD, and Hanley FL. Perfusion methods and modifications to the cardiopulmonary bypass circuit for midline unifocalization procedures. Submitted to J Extracorporeal Tech.
- 120) Ma M, Mainwaring RD, and Hanley FL. Anatomic repair using the hemi-Mustard atrial baffle and bidirectional cavopulmonary connection. Accepted for publication in Seminars in Thoracic and Cardiovasc Surgery

II. Chapters

- 1) Mainwaring RD, Lamberti JJ, and Uzark K: The Bidirectional Glenn: Palliation of the Univentricular Heart. In: Karp RD, Laks H, and Wechsler AS, Eds. Advances in Cardiac Surgery, Vol. 5, St. Louis Mosby-Year Book, Inc., 1994; 115-140
- 2) Lamberti JJ, and Mainwaring RD: Congenital Anomalies of the Mitral Valve. In: Mavroudis C, and Backer CL, Eds. Pediatric Cardiac Surgery Second Edition, St. Louis Mosby-Year Book, Inc., 1994: 459-473

- 3) Lamberti JJ, and Mainwaring RD: Bioprosthetic Valves in Children: Results. Heart Surgery, 1993; 91-103
- 4) Lamberti JJ, Uzark K, Mainwaring RD, and Spicer RL: Palliation of the Univentricular Heart. Heart Surgery, 1993; 153-160
- 5) Mainwaring RD, and Lamberti JJ: Tracheoesophageal Compressive Syndromes of Vascular Origin: Rings and Slings. In: Baue AE, Ed. Glenn's Thoracic and Cardiovascular Surgery Sixth Edition, Stamford, CA. Appleton and Lange, 1995; 1095-1103
- 6) Lamberti JJ, Uzark K, Mainwaring RD, Moore JE, and Spicer RL: Palliation of the Univentricular Heart. Heart Surgery, 1995; 139-149
- 7) Mainwaring RD, and Lamberti JJ: Atrial Septal Defects. In: Kaiser LR, Kron IL, and Spray TL, Eds. Mastery of Cardiothoracic Surgery, 1998; 677-686
- 8) Mainwaring RD, and Lamberti JJ: Atrial Septal Defects. In: Kaiser LR, Kron IL, and Spray TL, Eds. Mastery of Cardiothoracic Surgery, Second Edition, 2006; 739-749
- 9) Mainwaring RD, and Lamberti JJ: Congenital Anomalies of the Mitral Valve. In: Mavroudis C, and Backer CL, Eds. Pediatric Cardiac Surgery Fourth Edition, Wiley-Blackwell, Inc 2013; 640-658
- 10) Mainwaring RD, Pastuszko P, and Lamberti JJ: Atrial Septal Defects. In Kaiser LR, Kron IL, and Spray TL, Eds. Mastery of Cardiothoracic Surgery, Third Edition, 2014; 816-828.
- 11) Mainwaring RD and Hanley FL. Surgical Treatment of Pulmonary Atresia with Ventricular Septal Defect and Major Aortopulmonary Collateral Arteries. Society of Thoracic Surgery electronic textbook. In press.

III. Meeting Abstracts

- 1) Anderson PAW, Mainwaring RD, Glick KL, Killam AP: The Modulation of Fetal Left Ventricular Stroke Volume and Output. J Ped Res 17: 108A; 1983
- 2) Anderson PAW, Mainwaring RD, and Glick KL: Fetal Right Ventricular Output and Modulation: A new model to study ventricular interaction. Circulation 68 Suppl III: 122; 1983
- 3) Mainwaring RD, Mentzer RM, Ely SW, Rubio R, and Berne RM: The Role of Adenosine in the Regulation of Coronary Blood Flow in Newborn Lamb. Society of University Surgeons meeting, February 1985
- 4) Mainwaring RD, and Mentzer RM: Metabolic Response of the Immature Myocardium to Dipyridamole. Proceedings of the 19th Annual Meeting of the Association for Academic Surgery, p. 74, November 1985

- 5) Mainwaring RD, Lasley RD, Rubio R, Berne RM, and Mentzer RM: Effects of Adenosine on Glucose Uptake in Isolated Perfused Rat Heart. Proceedings of the Federation of American Societies for Experimental Biology; 45: 1038, 1986
- 6) Mainwaring, RD, Ely SW, and Mentzer RM: Myocardial Reactive Hyperemia in the Newborn. Annual meeting of the Association for Academic Surgery, November 1987
- 7) Ely SW, Wyatt DA, Lasley RD, Mainwaring RD, Walsh RS, Berne RM, and Mentzer RM: Purines Limit Ischemic Myocardial ATP Degradation and Promote Post-Ischemic Myocardial Function. Meeting of the American Physiological Society, November 1987
- 8) Rudolf LC, Mainwaring RD, Kern J, and Schenk WG III: Differentiating Pancreatic Pseudocyst and Necrosis using Computerized Tomography. Meeting of the Southern Surgical Association, p. 14, December 1988
- 9) Lamberti JJ, and Mainwaring RD: The Cryo-Preserved Homograft Valve in the Pulmonary Position: Mid-Term results and technical considerations. Meeting of the Fifth International Symposium on Cardiac Bioprosthesis, p. 82, May 1991
- 10) Stephanopoulos DE, and Mainwaring RD: Pediatric Cardiac Contusion: An Eight year Retrospective review. National Conference on Pediatric Trauma, September 1992
- 11) Moore JW, Uzark K, Thomson D, Mainwaring RD, and Lamberti JJ: Use of Nitrogen with Reduced Oxygen in Neonates with Severe Left Heart Obstruction. The American Heart Association meeting, November 1992
- 12) Terris M, Mair E, Mainwaring RD, and Kearns D: Airway Compromise Secondary to Vascular Compression in a Neonate. The Society for Ear, Nose and Throat Advances in Children, December 1992
- 13) Mainwaring RD, and Lamberti JJ: A Comparison of the Hormonal Response Following Bidirectional Glenn and Fontan Procedures. The Society of Thoracic Surgery, January 1993
- 14) Lamberti JJ, and Mainwaring RD: Management of Systemic Atrioventricular Valve Regurgitation in Infants and Children. The Pacific Coast Surgical Association, February 1993
- 15) Spicer RL, Uzark K, Mainwaring RD, and Lamberti JJ: Palliation of Univertricular Heart: Predictors of Outcome. JACC 1993; 21: 81A
- 16) Mainwaring RD, Lamberti JJ, and Moore JW: Endocrinologic Changes as a Predictor of Effusions following Bidirectional Glenn and Fontan Procedures, JACC 1993; 21: 81A
- 17) Mainwaring RD, and Tribble CG: The Misdiagnosis of Robert E. Lee. The 15th Biennial Meeting of the Muller Surgical Society, April 1993
- 18) Stephanopoulos D, Mainwaring RD, and Peterson B: Clinical Relevance of Traumatic Pediatric Cardiac Contusions: A nine year retrospective review. Society of Critical Care Medicine, March 1993

- 19) Mainwaring RD, and Lamberti JJ: Suppression of the Pituitary-Thyroid Axis as a Result of Deep Hypothermia and Circulatory Arrest in the Neonate. The International Symposium on the Neurohumoral Effects of Deep Hypothermia in the Neonate, March 1993
- 20) Carter TI, Mainwaring RD, and Lamberti JJ: The Damus-Kaye-Stansel Procedure: Mid-Term follow-up and technical considerations. The Society Thoracic Surgery, January 1994
- 21) Mainwaring RD, Lamberti JJ, and Carter TL Jr.: Bidirectional Glenn Procedure in Patients under Four Months of Age. JACC (Special Edition) 1994; 191A
- 22) Mainwaring RD, Carter TL Jr., and Lamberti JJ: Euthyroid Sick Syndrome in Neonates and Children Undergoing Cardiopulmonary Bypass. The 14th Annual San Diego Cardiothoracic Surgery Symposium, February 1994
- 23) Mainwaring RD, and Lamberti JJ: Tetralogy of Fallot Repair Results in Activation of the Renin-Angiotensin System. Presented at the 16th Congress of the European Society of Cardiology
- 24) Mainwaring RD, Uzark K, Lamberti JJ, and Spicer RL: Bidirectional Glenn: Is accessory pulmonary blood flow good or bad? Circulation 1994; 90 (part II): I-421
- 25) Spicer RL, Uzark K, Cocalis MW, Moore JW, Mainwaring RD, and Lamberti JJ: Aortopulmonary Collaterals and Prolonged Pleural Effusions after Modified Fontan Procedure. Pediatric Cardiology 1994; 15: 256
- 26) Packer MG, Canty TG, Collins DL, Lamberti JJ, Lynch FP, and Mainwaring RD: Wilm's Tumor Removal Utilizing Cardiopulmonary Bypass. Presented at The Western Section of the American Urological Association
- 27) Uzark K, Spicer RL, Lincoln A, Magiari M, Moore JW, Kirkpatrick SE, Mathewson JW, Mainwaring RD, and Lamberti JJ: Neurodevelopmental Outcomes in Children with Fontan Repair of Functional Single Ventricle. Circulation 1995; 92(8): I-178
- 28) Spicer R, Uzark K, Cocalis M, Moore JW, Mainwaring RD, and Lamberti JJ: Down's Syndrome and Functional Single Ventricle: The Fontan Approach. Presented at the Symposium of Pediatric Cardiology and Cardiac Surgery. May 1997
- 29) Mainwaring RD, Lamberti JJ, Uzark K, and Spicer RL: Effects of Accessory Pulmonary Blood Flow on Survival Following the Bidirectional Glenn Procedure. Circulation 2001; Vol. 104 (17): I-1779
- 30) Mainwaring RD, Uzark K, Bichell D, and Lamberti JJ: Hemi-Fontan versus Cavopulmonary Shunt: Mid-term follow-up and evaluation of Sinus Node Function. Circulation 2001; Vol. 104 (17): II-710
- 31) Petrossian E, Reddy VM, Collins KK, Culbertson CB, MacDonald MJ, Lamberti JJ, Reinhartz O, Mainwaring RD, Malhorta SP, Suleman S, and Hanley FL: The

- Extracardiac Conduit Fontan Operation using Minimal Approach Extracorporeal Circulation: Short and Long-Term Outcomes. *J Thorac Cardiovasc Surg* 2006; 132: 1054-1063
- 32) Mainwaring RD, Parise C, Wright SB, Juris AL, Ahtel RA, and Fallah H: Brain Natriuretic Peptide Levels before and after Ventricular Septal Defect Repair. 26th Annual San Diego Cardiothoracic Surgery Symposium 2006; 29-30
 - 33) Mainwaring RD, Reddy VM, Reinhartz O, Lamberti JJ, Jacobson J, Jimenez D, and Hanley FL: Starting a Congenital Heart Surgery Program: Does an Affiliation with a University Program Facilitate the Process? Presented at the World Society for Pediatric and Congenital Heart Surgery, May 2007
 - 34) Portman M, Mainwaring RD, Karl T, Patel H, Mott A, Hastings L: Triiodothyronine for Infants and Children Undergoing Cardiopulmonary Bypass (TRICC) Study: Safety and Efficacy. Presented at the AHA November 2008 meeting.
 - 35) Mainwaring RD, Sheikh AY, Reddy VM, Punn R, and Hanley FL. Surgical Results in Patients with Pulmonary Atresia/ Major Aortopulmonary Collaterals and Alagille Syndrome. Presented at the 2011 European Association of Cardiothoracic Surgery meeting, October 2011.
 - 36) Shillingford MS, Mainwaring RD, Davies R, Koltai P, Reddy VM, and Hanley FL. Surgical Reconstruction of Tracheal Stenosis in Conjunction with Congenital Heart Defects. Presented at the 58th annual Southern Thoracic Surgical Association meeting, November 9, 2011.
 - 37) Sheahan DC, Vasanawala S, Newman B, Mainwaring RD, Hanley FL, and Chan FP. Diagnostic Accuracy of Coronary CTA Determining Intramural Course of Malignant Aberrant Coronary Artery. Presented at the Radiological Society of North America meeting, November, 2011.
 - 38) Mainwaring RD, Reddy VM, Perry SB, Peng L, and Hanley FL. Mid-to-Late Term Outcome for Patients Undergoing Aortopulmonary Window as the Initial Palliation for Pulmonary Atresia/ Ventricular Septal Defect/ Major Aortopulmonary Collaterals. Presented at the 48th Annual meeting of the Society of Thoracic Surgeons, January 30, 2012.
 - 39) Monge M, Mainwaring RD, Sheikh AY, Punn R, Reddy VM, and Hanley FL. Surgical Reconstruction of Peripheral Pulmonary Artery Stenosis in Williams and Alagille Syndromes. Presented at the 38th annual meeting of the Western Thoracic Surgical Society, June 2012.
 - 40) Mainwaring RD, Reddy VM, Peng L, Kuan C, and Hanley FL. Late Hemodynamic Assessment of patients who have Undergone Complete Repair of Pulmonary Atresia/ Ventricular Septal Defect/ Major Aortopulmonary Collaterals. Presented at the 26th annual meeting of the European Association of Cardiothoracic Surgeons, October 2012.
 - 41) Mainwaring RD, Reddy VM, and Hanley FL. Surgical Reconstruction of Pulmonary Stenosis with Ventricular Septal Defect and Major Aortopulmonary Collaterals. *J South African Heart Association* 2013; 10: 18.

- 42) Sleasman J, Margetson T, Shuttleworth P, McCarthy JP, Jihadeh A, Mainwaring RD, and Hanley FL. Antegrade Cerebral Perfusion for Aortic Arch Repair in Infants and Children. Presented at the 33rd annual CREF meeting, February 2013.
- 43) Mainwaring RD, Reddy VM, and Hanley FL. Completion of all Three Stages of the Fontan Pathway without the use of Cardiopulmonary Bypass. Presented at the 2013 American Heart Association meeting.
- 44) Muralidaran A, Mainwaring RD, Reddy VM, and Hanley FL. Incidence of Anomalous Coronary Arteries in Pulmonary Atresia with Ventricular Septal Defect and Major Aortopulmonary Collaterals. JACC 2013; 61 (10)-Supplement A: A116.
- 45) Mainwaring RD, Reddy VM, Reinhartz O, Petrossian E, and Hanley FL. Surgical Repair of Anomalous Aortic Origin of a Coronary Artery—Who Should Have It? Presented at the 27th annual meeting of the European Association for Cardiothoracic Surgeons.
- 46) Watanabe N, Mainwaring RD, Reddy VM, and Hanley FL. Early Complete Repair of Pulmonary Atresia with Ventricular Septal Defect and Major Aortopulmonary Collaterals. Presented at the 60th annual meeting of the Southern Thoracic Surgical Association.
- 47) Carrillo SA, Mainwaring RD, Schaffer JM, Wright G, Maeda K, Hanley FL, and Reddy VM. Contemporaneous Comparison of the Yasui and Norwood Procedures at a Single Institution. Presented at the 40th annual meeting of the Western Thoracic Surgical Association, June 2014.
- 48) Mainwaring RD, Schaffer JM, Reddy VM, and Hanley FL. Fate of RV to PA Conduits Following Complete Repair of Pulmonary Atresia/Ventricular Septal Defects/Major Aortopulmonary Collaterals. Presented at the 28th annual meeting of the European Association for Cardiothoracic Surgeons, October, 2014.
- 49) Watanabe N, Mainwaring RD, Carrillo SA, Reddy VM, and Hanley FL. Left Ventricular Retraining and Late Arterial Switch for D-Transposition of the Great Arteries. Presented at the 61st annual meeting of the Southern Thoracic Surgical Association, November 2014.
- 50) Carrillo SA, Mainwaring RD, Patrick WL, Watanabe N, Reddy VM, and Hanley FL. Surgical Repair of Pulmonary Atresia/Ventricular Septal Defect/Major Aortopulmonary Collaterals with Absent Intra-pericardial Pulmonary Arteries. Presented at the 51st annual meeting of the Society for Thoracic Surgeons, January 2015.
- 51) Said S, Mainwaring RD, Ma M, Tacy T, and Hanley FL. Pulmonary Valve Repair For Patients with Acquired Pulmonary Valve Insufficiency. Presented at the 62nd annual meeting of the Southern Thoracic Surgical Association, November, 2015.
- 52) Mainwaring RD and Hanley FL. Surgical Repair of 105 patients with Anomalous Aortic Origin of a Coronary Artery (AAOCA): What have we learned and what do we still need not know? Presented at the 7th joint Scandinavian conference in Cardiothoracic Surgery, September, 2015
- 53) Ibrahimiye AN, Mainwaring RD, Patrick WL, and Hanley FL. Left Ventricular Retraining and Double Switch in Patients with Corrected Transposition of the Great Arteries. Presented at the Congenital Heart Surgeons' Society meeting, October 2016.

- 54) Patrick WL, Mainwaring RD, Reinhartz O, Punn R, Tacy T, and Hanley FL. Major Aortopulmonary Collateral Arteries in Patients with Anatomy other than Pulmonary Atresia with Ventricular Septal Defect. Presented at the 63rd annual meeting of the Southern Thoracic Surgical Association, November 11, 2016.
- Winner of the George R. Daicoff award for the best congenital paper at the 2016 STSA meeting and winner of the best overall paper at the 2016 STSA meeting.
- 55) Mainwaring RD, Patrick WL, and Hanley FL. Comparison of the Results for Left Ventricular Retraining in Patients with D- and L-Transposition. Presented at the 7th World Congress for Pediatric Cardiology and Cardiac Surgery, Barcelona, Spain, July 18, 2017.
- 56) Greene CL, Mainwaring RD, Sidell D, Yarlagadda V, Patrick WL, and Hanley FL. Impact of Phrenic Nerve Palsy and the Need for Diaphragm Plication Following Surgery for Pulmonary Atresia with Ventricular Septal Defect and Major Aortopulmonary Collaterals. Presented at the 43rd annual meeting of the Western Thoracic Surgical Association, June 2017.
- Second place prize in the Resident poster competition at the 100th annual meeting of the American Association for Thoracic Surgery, May, 2017.
- 57) Hanley FL, Mainwaring RD, Patrick WL, Roth S, Kamra K, and Wise-Faberowski L. Surgical Algorithm and Results in Patients with Pulmonary Atresia with Ventricular Septal Defect and Major Aortopulmonary Collateral Arteries. Presented at the 100th annual meeting of the American Association for Thoracic Surgery, May 2017.
- 58) Mainwaring RD, Patrick WL, Ma M, and Hanley FL. An Analysis of Patients requiring Unifocalization Revision following Midline Unifocalization for Pulmonary Atresia with Ventricular Septal Defect and Major Aortopulmonary Collaterals. Presented at the 31st annual meeting of the European Association for Cardiothoracic Surgery, October, 2017.
- 59) Mainwaring RD, Patrick WL, Ma M, Rosenblatt TR, and Hanley FL. Surgical Repair of Ductus Arteriosus or Hemi-truncus to One Lung and Major Aortopulmonary Collaterals to the Contralateral Lung. Presented at the 54th annual meeting of the Society for Thoracic Surgeons, January, 2018.
- 60) Mainwaring RD, Patrick WL, Rosenblatt TR, Ma M, Kamra K, Arunamata A, and Hanley FL. Surgical Results of Unifocalization Revision. Presented at the 98th annual meeting of the American Association for Thoracic Surgery, April, 2018.
- 61) Mainwaring RD, Patrick WL, Rosenblatt TR, Nasirov T, Kamra K, and Hanley FL. Analysis of achieving an “ideal outcome” following midline unifocalization in pulmonary atresia with ventricular septal defect and major aortopulmonary collateral arteries. Presented at the 26th annual meeting of the Asian Society for Cardiovascular and Thoracic Surgery, May, 2018.
- 62) Greene CL, Mainwaring RD, and Hanley FL. Novel approach to repair of tetralogy of Fallot with absent pulmonary valve syndrome and severe airway compression. Accepted for presentation at the 65th annual meeting of the Southern Thoracic Surgical Association, November, 2018.

- 63) Margetson TD, Sleasman J, Kollmann S, McCarthy PJ, Jahadi O, Sheff D, Shuttleworth P, Mainwaring RD, and Hanley FL. Perfusion methods and modifications to the cardiopulmonary bypass circuit for midline unifocalization procedures. Presented at the Amsect Pediatric Perfusion Conference, October, 2018

Winner of the best abstract presented at the 2018 Amsect meeting

- 64) Mainwaring RD, Patrick WL, Chan F, Newman B, Rosenblatt TR, Arunamata A, and Hanley FL. Left ventricular re-training in corrected transposition: Relationship between pressure and mass. Accepted for presentation at the American Association for Thoracic Surgery, 2019.
- 65) Martin E, Mainwaring RD, Collins TR, and Hanley FL. Surgical repair of peripheral pulmonary artery stenosis in patients without Williams or Alagille syndrome. Submitted to Western Thoracic Surgical Association, 2019

IV. Presentations

National

- 1) The Role of Adenosine in the Regulation of Coronary Blood Flow in Newborn Lambs. Society of University Surgeons, Boston MA, February 1985
- 2) Effects of Dipyridamole on Myocardial Glucose Uptake in the Newborn Lamb. Association of Academic Surgery, Cincinnati, OH 1985
- 3) Effects of Adenosine on Glucose Uptake in the Isolated Perfused Rat Heart. Federation of American Societies for Experimental Biology, St. Louis, MO, 1986
- 4) Myocardial Reactive Hyperemia in the Newborn. Association for Academic Surgery, Orlando, FL, November 1987
- 5) Differentiating Pancreatic Pseudocyst and Pancreatic Necrosis using Computerized Tomography. Southern Surgical Association, Boca Raton, FL, 1988
- 6) Compression of the Hormonal Response after Bidirectional Glenn and Fontan Procedures. Society of Thoracic Surgeons, San Antonio, TX, January 1993
- 7) Endocrinologic Changes as a Predictor of Effusions following Bidirectional Glenn and Fontan Procedures. American College of Cardiology, Anaheim, CA, March 1993
- 8) Suppression of the Pituitary-Thyroid Axis following Cardiopulmonary Bypass and Deep Hypothermia in the Neonate. Symposium of the Neurohumoral Effects of Profound Hypothermia in Infant Heart Surgery, London, England, March 1993
- 9) Euthyroid Sick Syndrome in Neonates and Children Undergoing Cardiopulmonary Bypass. The 14th Annual Pathophysiology and Techniques of Cardiopulmonary Bypass Symposium, San Diego, CA, February 1994

- 10) Bidirectional Glenn in Patients under Four Months of Age. Annual Meeting of the American College of Cardiology, Atlanta, GA, March 1994
- 11) Tetralogy of Fallot Repair Results in Activation of the Renin-Angiotensin System. The 16th Congress of The European Society of Cardiology, Berlin, Germany, September 1994
- 12) The Bidirectional Glenn: Is Accessory Pulmonary Blood Flow Good or Bad? The 67th Scientific Session of the American Heart Association Meeting, Dallas, TX, November 1994
- 13) Complement and Cytokine Activation following the Modified Fontan Procedure. The 17th Annual Pathophysiology and Techniques of Cardiopulmonary Bypass Symposium, San Diego, CA, February 1997
- 14) Left Atrial Aneurysm in a Four-Year-Old. The 76th Annual Meeting of the American Association for Thoracic Surgery, February 1997
- 15) Management Strategies for the Single Ventricle. The 18th Annual Pathophysiology and Techniques of Cardiopulmonary Bypass Symposium, San Diego, CA, March 1998
- 16) Effects of Accessory Pulmonary Blood Flow on Survival following Bidirectional Glenn Procedure. The 71st Scientific Session of the American Heart Association Meeting, Dallas, TX, November 1998
- 17) Neuroendocrine Mechanisms of Heart Failure in Congenital Heart Disease. The Nordic Cardiology Conference, Oslo, Norway, June 2001
- 18) Hemi-Fontan versus Cavopulmonary Shunt: Mid-Term follow-up and evaluation of Sinus Node Function. The 74th Scientific Session of the American Heart Association, Anaheim, CA, November 2001
- 19) Management of Patients with Single Ventricle. Visiting Professor, Oslo, Norway, September 2002
- 20) Repair of Tetralogy of Fallot: Complete Atrioventricular Canal and Dextroposition of the Heart through a Right Thoracotomy. The Southern Thoracic Surgical Association, Miami, FL, November 2002
- 21) Brain Natriuretic Peptide levels before and after Ventricular Septal Defect Repair. The 26th Annual Pathophysiology and Techniques of Cardiopulmonary Bypass Symposium, San Diego, CA, February 2006
- 22) Starting a Congenital Heart Surgery Program: Does an Affiliation with a University Program Facilitate the Process? Presented at the Inaugural Meeting of the World Society for Pediatric And Congenital Heart Surgery, Washington DC, May 2007
- 22) Surgical Outcomes for Patients with Pulmonary Atresia/Major Aortopulmonary Collaterals and Alagille Syndrome. The 25th Annual meeting of the European Association for Cardio-Thoracic Surgery, Lisbon, Portugal, October 3, 2011.

- 23) Surgical Reconstruction of Tracheal Stenosis in Conjunction with Congenital Heart Defects. The 58th Annual meeting of the Southern Thoracic Surgical Association, San Antonio, Texas, November 11, 2011
- 24) Mid-to Late Term Outcomes for Patients Undergoing an Aortopulmonary Window as their Initial Palliation for Pulmonary Atresia/ Ventricular Septal Defect/ Major Aortopulmonary Collaterals. The 48th Annual Meeting of the Society of Thoracic Surgeons, Fort Lauderdale, Florida, January 30, 2012
- 25) Late Hemodynamics after Complete Repair of Pulmonary Atresia/ Ventricular Septal Defect/ Major Aortopulmonary Collaterals. The 26th Annual meeting of the European Association for Cardio-Thoracic Surgery, Barcelona, Spain, October 30, 2012.
- 26) Surgical Reconstruction of Pulmonary Stenosis with Ventricular Septal Defect and Major Aortopulmonary Collaterals. 6th World Congress for Paediatric Cardiology and Cardiac Surgery, Capetown, South Africa, Feb, 2013.
- 27) Surgical Repair of Anomalous Aortic Origin of a Coronary Artery—Who should have it? The 27th Annual meeting of the European Association for Cardio-Thoracic Surgery, Vienna, Austria, October 5-9th, 2013.
- 28) Three-Stage Fontan Completion without Cardiopulmonary Bypass. The Annual meeting of the American Heart Association, Dallas, Texas. November 16-18, 2013
- 29) Fate of RV to PA Conduits following Complete Repair of Pulmonary Atresia with Major Aortopulmonary Collaterals. The 28th Annual meeting of the European Association for Cardio-Thoracic Surgery, Milan, Italy, October 11-14th, 2014.
- 30) Anomalous Aortic Origin of a Coronary Artery (AAOCA): What do we know and what do we still need to find out? The 7th joint Scandinavian conference in Cardiothoracic Surgery, Bergen, Norway, September 5, 2015.
- 31) Comparison of Left Ventricular Re-training in D- and L- Transposition of the Great Arteries. World Congress of Pediatric Cardiology and Cardiac Surgery, Barcelona, Spain. July 2017.
- 32) An analysis of Patients Requiring Unifocalization Revision Following Midline Unifocalization for Pulmonary Atresia with Ventricular Septal Defect and Major Aortopulmonary Collaterals. 28th annual meeting of the European Association for Cardio-Thoracic Surgery, Vienna, Austria, October 10, 2017.
- 33) Surgical Repair of Ductus Arteriosus or Hemi-truncus to One Lung and Major Aortopulmonary Collaterals to the Contralateral Lung. 54th annual meeting of the Society for Thoracic Surgeons, January, 2018.
- 34) Surgical Results of Unifocalization Revision. 98th annual meeting of the American Association for Thoracic Surgeons, San Diego, CA, April 29th, 2018.

- 35) An Analysis of the Likelihood of Achieving an Ideal Outcome Following Midline Unifocalization. 26th annual meeting of the Asian Society for Cardiovascular and Thoracic Surgery, Moscow, Russia, May 25th, 2018.
- 36) Surgical management of intra-conal left main coronary arteries. 4th Coronary Artery anomaly symposium, Houston, Texas, December 8th, 2018.
- 37) Left ventricular re-training in corrected transposition: Relationship between pressure and mass. 99th annual meeting of the American Association for Thoracic Surgeons, Toronto, Canada, May, 2019.

V. Presentations

Local

- 1) Determinants of Cardiac Output in the Fetal Lamb. The Spring Cardiovascular Symposium, Durham, NC, April 1982
- 2) The Role of Adenosine in the Regulation of Coronary Blood Flow in the Newborn Lambs. Virginia Surgical Society, May 1990
- 3) Current Surgical Therapy for Hypoplastic Left Heart Syndrome. Surgery Grand Rounds, University of Pennsylvania, 1990
- 4) Management of Hypoplastic Left Heart Syndrome. Pediatric Grand Rounds, Children's Hospital and Health Center, San Diego, CA, February 1991
- 5) Matching the Operation to the Anatomy and Physiology in Patients with Pulmonary Atresia and Intact Ventricular Septum. Muller Surgical, Charlottesville, VA, 1991
- 6) Management of Hypoplastic Left Heart Syndrome. Pediatric Grand Rounds, Mercy Hospital, San Diego, CA, November 1991
- 7) Endocrine Function following the Hemi-Fontan Procedure. University of California, Riverside/Nichols Institute Symposium on Cellular and Molecular Endocrinology, Riverside, CA, March 1997
- 8) Repair of Tetralogy of Fallot: Complete Atrioventricular Canal and Dextroposition of the Heart through a Right Thoracotomy. The Southern Thoracic Surgery Association, Miami Beach, FL, November 2002
- 9) The Cardiac Illness of General Robert E. Lee. The Muller Surgical Society, Charlottesville, VA, April 1993
- 10) The Misdiagnosis of Robert E. Lee. Pediatric Grand Rounds, Children's Hospital and Health Center, San Diego, CA, October 1993
- 11) The Heart and Hormones. Pediatric Grand Rounds, Children's Hospital and Health

- Center, San Diego, CA, October 1994
- 12) Hormonal Changes following Open Hear Surgery. Scripps Clinic Grand Rounds, La Jolla, CA, February 1995
 - 13) Management of the Single Ventricle Patient. Grand Rounds, University of Virginia Hospital, Charlottesville, VA, October 1995
 - 14) Left Atrial Aneurysm. The 15th Biennial Meeting of the Muller Surgical Society, Charlottesville, VA, April 1997
 - 15) Medical and Surgical Considerations for the Bidirectional Glenn. The California Society of Pediatric Cardiology, Marina Del Rey, CA, September 1997
 - 16) Physiology and Management of Children born with Single Ventricle. Newborn Grand Rounds, Christiana Care Health Systems, Medical Center of Delaware, Wilmington, DE, June 1999
 - 17) The Evolution of Congenital Heart Surgery. Pediatric Grand Rounds, Memphis TN, May 2002
 - 18) An Overview of Pediatric Heart Surgery Progress at Sutter Memorial Hospital. 1st Annual Sutter Pediatric Heart Surgery Symposium, Sacramento, CA, September 2004
 - 19) Plasma BNP levels before and after VSD Repair. 2nd Annual Sutter Pediatric Heart Surgery Symposium, Sacramento, CA, October 2005
 - 20) Advances in Congenital Heart Surgery. Sacramento Pediatric Society, Sacramento, CA, February 2006
 - 21) Surgical Treatment for Adults with Congenital Heart Disease. 3rd Annual Sutter Pediatric Heart Surgery Symposium, Sacramento, CA, September 2006
 - 22) What's New in Congenital Heart Surgery? Sacramento Pediatric Society, Sacramento, CA March 2008
 - 23) Surgery on Congenital Abnormalities of the Coronary Arteries. Pediatric Cardiology Symposium, Yuba City, CA, February 2009
 - 24) AP Window for PA/VSD/MAPCA patients. Anesthesia Journal club, Stanford University, Stanford, CA, April 18, 2012
 - 25) Early Complete Repair of Pulmonary Atresia with Ventricular Septal Defect and Major Aortopulmonary Collaterals. Western Society of Pediatric Cardiology, Monterey, CA, June 7-9, 2013
 - 26) Update on topics in Congenital Heart Surgery at Stanford University, Cardiac Surgery Journal Club, April 18, 2016.

VI. Movies

- 1) Mainwaring RD, Lamberti JJ, and Spicer RL: Atrial Aneurysm in a Four-Year-Old. Annual Meeting of the American Association for Thoracic Surgery
- 2) Mainwaring RD, and Kearns DB: Repair of Congenital Long Segment Tracheal Stenosis
- 3) Mainwaring RD, and Watson DS: Repair of Tetralogy of Fallot: Complete Atrioventricular Canal and Dextroposition of the Heart through a Right Thoracotomy. The Southern Thoracic Surgical Association, November 2002
- 4) Mainwaring RD, and Reddy VM: Pulmonary Valve Replacement and Cryoablation of Atrial Tachycardia Site. The 3rd Annual Sutter Pediatric Heart Surgery Symposium, September 2006
- 5) Mainwaring RD, Reinhartz O, and Wright SB: Excision of an Intracardiac Papillary Fibroelastoma. The 3rd Annual Sutter Pediatric Heart Surgery Symposium, September 2006
- 6) Greene CL, Mainwaring RD, and Hanley FL. Surgical repair of absent pulmonary valve syndrome with severe airway compression. Accepted for presentation at the 2018 Southern Thoracic Surgical Association meeting, November 2018.