

CURRICULUM VITAE, updated 6/2008

Paul Michel Kirshbom, M.D.

Work Address

Emory Clinic
Cardiothoracic Surgery
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Education

1984-1987 B.A.- Biology, Johns Hopkins University, Baltimore, MD
1987-1991 M.D.- Johns Hopkins Medical School, Baltimore, MD

Honors

1983 National Honor Society
1984-1987 Beneficial Hodson's Scholarship, Johns Hopkin's University, Baltimore, MD
1987 Phi Beta Kappa
1988 Howard Hughes-Summer Research Fellowship, NIH, Bethesda, MD
2007 Emory Pediatric Cardiac Surgery Outstanding Teacher

Postgraduate Training

1991-1998 Resident, General Surgery
Duke University Medical Center, Durham, NC

1993-1995 Research Fellow, Cardiothoracic Surgery
Duke University Medical Center, Durham, NC

1998-2000 Fellow, Cardiothoracic Surgery
Duke University Medical Center, Durham, NC

2000-2001 Research Fellow, Pediatric Cardiothoracic Surgery
Children's Hospital of Philadelphia, Philadelphia, PA

2001-2002 Fellow, Pediatric Cardiothoracic Surgery
Children's Hospital of Philadelphia, Philadelphia, PA

2007 Pediatric Executive Program
Department of Pediatrics
Emory University School of Medicine, Atlanta, GA

2007-2008 Center for Leadership
Children's Healthcare of Atlanta, Atlanta, GA

Academic Appointments

2002 Assistant Professor of Surgery
Division of Pediatric Cardiothoracic Surgery

Emory University School of Medicine, Atlanta, GA

Clinical and Administrative Appointments

- 2002-present Pediatric Cardiothoracic Surgeon
Children's Healthcare of Atlanta, Atlanta, GA
- 2004-present Medical Director, Cardiac ECMO Program
Children's Healthcare of Atlanta, Atlanta, GA
- 2006-present Quality Officer, Pediatric Cardiac Surgery
Children's Healthcare of Atlanta, Atlanta, GA
- 2008 Director, Operative Services
Children's Healthcare of Atlanta, Egleston, Atlanta, GA

Board Certification

- 1999 American Board of Surgery, Certificate # 43891
- 2001 American Board of Thoracic Surgery, Certificate #6520

Licensure

- 1991-2001 Louisiana, #021520
- 2000-2002 Pennsylvania, #MD-070347-L
- 2000-2003 New Jersey, #MA-70667
- 2002-present Georgia, #051593

Grant Support

- 2000-2001 Thoracic Surgery Foundation Research Grant
Scientific mentor: J. William Gaynor, M.D., Children's Hospital of Philadelphia
"Matrix metalloproteinases and pulmonary vascular remodeling"
Level of support: \$30,000
- 2003 Emory-Egleston Children's Research Center Seed Grant
Principle investigator
"Induction of hypoxia inducible factor as a neurologic protection strategy for pediatric cardiac surgery and circulatory arrest"
Level of support: \$50,000
- 2003-2005 Thoracic Surgery Foundation Career Development Award
Principle investigator
"Induction of hypoxia inducible factor as a neurologic protection strategy for pediatric cardiac surgery and circulatory arrest"
Level of support: \$50,000
- 2004 Emory-Egleston Children's Research Center Seed Grant
Principle investigator
"In vivo evaluation of a balloon-dilatable systemic to pulmonary shunt"
Level of support: \$50,000

- 2006 Emory-Egleston Children's Research Center Seed Grant
Principle investigator
"Evaluation of genetic factors influencing long-term outcomes for children with single ventricle heart disease"
Level of support: \$50,000
- 2007 Friends Research Fund, Children's Healthcare of Atlanta
Principle investigator
"Evaluation of a modified perfusion strategy for neonatal aortic arch reconstruction: Does perfusing the lower body during arch repair help?"
Level of support: \$41,500

Professional Society Memberships:

- 1999 American College of Surgeons
2000 American Medical Association
2002 Southern Thoracic Surgical Association
2003 American Heart Association
2004 Society of Thoracic Surgeons
2007 Congenital Heart Surgeons Society

Society and Journal Activities

Ad hoc manuscript review: Journal of Thoracic and Cardiovascular Surgery, Annals of Thoracic Surgery, Pediatric Cardiology

2006-2007 American Heart Association, Radiology, Imaging, and Surgery Study Group

BIBLIOGRAPHY

Peer-Reviewed Publications:

1. O'Brian MR, **Kirshbom PM**, Maier RJ: TN-5 induced cytochrome mutants of Bradyrhizobium japonicum: Effects of the mutations on cells grown symbiotically and in culture. *J Bacteriology*, 169:1089-1094, 1986.
2. O'Brian MR, **Kirshbom PM**, Maier RJ: Bacterial heme synthesis is required for expression of the leghemoglobin holoprotein but not the apoprotein in soybean root nodules. *Proc Nat Acad Sci*, 84:8390-8393, 1987.
3. Basta M, **Kirshbom P**, Frank MM, Fries LF: Mechanisms of therapeutic effect of high-dose intravenous immunoglobulin: Attenuation of acute, complement-dependent immune damage in a guinea pig model. *J Clin Inv*, 84:1974-1981, 1989.
4. **Kirshbom PM**, Tsui SSL, DiBernardo LR, Meliones JM, Schwinn DA, Ungerleider RM, Gaynor JW: Blockade of endothelin converting enzyme significantly reduces pulmonary hypertension after cardiopulmonary bypass and circulatory arrest. *Surgery*, 118:440-445, 1995.

5. Skaryak LA, **Kirshbom PM**, DiBernardo LR, Kern FH, Greeley WJ, Ungerleider RM, Gaynor JW. Modified ultrafiltration improves cerebral metabolic recovery after circulatory arrest. *J Thorac Cardiovasc Surg*, 109:744-752, 1995.
6. **Kirshbom PM**, Skaryak LA, DiBernardo LR, Kern FH, Greeley WJ, Gaynor JW, Ungerleider RM. Effects of aortopulmonary collaterals on cerebral cooling and cerebral metabolic recovery following circulatory arrest. *Circulation*, 92[Supp II]:II490-II494, 1995.
7. **Kirshbom PM**, Tapson VF, Harrison JK, Davis RD, Gaynor JW. Delayed right heart failure following lung transplantation. *Chest*, 109:575-577, 1996.
8. **Kirshbom PM**, Skaryak LA, DiBernardo LR, Kern FH, Greeley WJ, Gaynor JW, Ungerleider RM. pH-stat cooling improves cerebral metabolic recovery after circulatory arrest in a piglet model of aortopulmonary collaterals. *J Thorac Cardiovasc Surg*, 111:147-157, 1996.
9. **Kirshbom PM**, Jacobs MT, Tsui SSL, DiBernardo LR, Schwinn DA, Ungerleider RM, Gaynor JW. Effects of cardiopulmonary bypass and circulatory arrest on endothelium dependent vasodilation in the lung. *J Thorac Cardiovasc Surg*, 111:1248-1256, 1996.
10. Tsui SSL, **Kirshbom PM**, Davies MJ, Jacobs MT, Greeley WJ, Kern FH, Gaynor JW, Ungerleider RM. Nitric oxide production affects cerebral perfusion and metabolism after deep hypothermic circulatory arrest. *Ann Thorac Surg*, 61:1699-1707, 1996.
11. Skaryak LA, Lodge AJ, **Kirshbom PM**, DiBernardo LR, Wilson BG, Meliones JN, Ungerleider RM, Gaynor JW. Low-flow cardiopulmonary bypass produces greater pulmonary dysfunction than circulatory arrest. *Ann Thorac Surg*, 62(5):1284-1288, 1996.
12. **Kirshbom PM**, Page SO, Jacobs MT, Tsui SS, Bello E, Ungerleider RM, Schwinn DA, Gaynor JW. Cardiopulmonary bypass and circulatory arrest increase endothelin-1 production and receptor expression in the lung. *J Thorac Cardiovasc Surg*, 113(4):777-783, 1997.
13. **Kirshbom PM** and Ungerleider RM. Cerebral responses to cardiopulmonary bypass and circulatory arrest in neonates. *Cardiovasc Eng*, 2(2):130-132, 1997.
14. Tsui SSL, **Kirshbom PM**, Davies MJ, Jacobs MT, Kern FH, Gaynor JW, Greeley WJ, Ungerleider RM. Thromboxane A₂-receptor blockade improves cerebral protection for deep hypothermic circulatory arrest. *Eur J Cardiothor Surg*, 12:228-235, 1997.
15. Roberts IG, Fallon P, Kirkham FJ, **Kirshbom PM**, Cooper CE, Elliott MJ, Edwards AD. Measurement of cerebral blood flow during cardiopulmonary bypass with near-infrared spectroscopy. *J Thorac Cardiovasc Surg*, 115:94-102, 1998.
16. DiBernardo LR, **Kirshbom PM**, Skaryak LA, Quarterman RL, Johnson RL, Davies MJ, Gaynor JW, Ungerleider RM. Acute functional consequences of left ventriculotomy. *Ann Thorac Surg*, 66:159-165, 1998.
17. **Kirshbom PM**, Kherani AR, Onaitis MW, Feldman JM, Tyler DS. Carcinoids of unknown primary: Comparative analysis with foregut, midgut, and hindgut carcinoids. *Surgery*, 124:1063-70, 1998.

18. **Kirshbom PM**, Kherani AR, Onaitis MW, Kehoe TE, Feldman C, Feldman JM, Tyler DS. Foregut carcinoids: A clinical and biochemical analysis. *Surgery*, 126:1105-10, 1999.
19. **Kirshbom PM**, Jagers J, Ungerleider RM. Tetralogy of Fallot with Absent Pulmonary Valve: Simplified Technique for Homograft Repair. *J Thorac Cardiovasc Surg*, 118:1125-27, 1999.
20. Jagers JJ, Forbess JM, Shah AS, Meliones JN, **Kirshbom PM**, Miller CE, Ungerleider RM. Extracorporeal membrane oxygenation for infant postcardiotomy support: significance of shunt management. *Ann Thorac Surg*, 69:1476-83, 2000.
21. Onaitis MW, **Kirshbom PM**, Hayward TZ, Quayle FJ, Feldman JM, Seigler HF, Tyler DS. Gastrointestinal carcinoids: characterization by site of origin and hormone production. *Ann Surg*, 232(4):549-556, 2000.
22. **Kirshbom PM**, Bridges ND, Myung RJ, Gaynor JW, Clark BJ, Spray TL. Use of extracorporeal membrane oxygenation in pediatric thoracic organ transplantation. *J Thorac Cardiovasc Surg*, 123:130-136, 2002.
23. **Kirshbom PM**, Myung RJ, Gaynor JW, Ittenbach RF, Paridon SM, DeCampli WM, Karl TR, Spray TL. Pre-operative pulmonary venous obstruction affects long-term outcome for survivors of total anomalous pulmonary venous connection repair. *Ann Thorac Surg*, 74:1616-1620, 2002.
24. Clerin V, Gusic RJ, O'Brien J, **Kirshbom PM**, Myung RJ, Gaynor JW, Gooch KJ. Mechanical environment, donor age, and presence of endothelium interact to modulate porcine artery viability ex vivo. *Ann Biomed Eng*, 30(9):1117-1127, 2002.
25. Myung RJ, **Kirshbom PM**, Petko M, Golden JA, Judkins AR, Ittenbach RF, Spray TL, Gaynor JW. Modified ultrafiltration does not improve neurologic outcome following deep hypothermic circulatory arrest. *Eur J Cardiothorac Surg*, 24(2):243-248, 2003.
26. Kanter KR, Fyfe DA, Mahle WT, Forbess JM, **Kirshbom PM**. Results with the Freestyle porcine aortic root for right ventricular outflow tract reconstruction in children. *Ann Thorac Surg*, 76(6):1889-1894, 2003.
27. Kanter KR, Forbess JM, Fyfe DA, Mahle WT, **Kirshbom PM**. De Vega tricuspid annuloplasty for systemic tricuspid regurgitation in children with univentricular physiology. *J Heart Valve Dis*, 13(1):86-90, 2004.
28. Kogon B, **Kirshbom PM**, Forbess JM, Kanter KR. Thrombolytic therapy for prosthetic valve thrombosis in children: Two case reports and review of the literature. *J Thorac Cardiovasc Surg*, 127(5):1519-1522, 2004.
29. Simsic JM, Reddy VS, Kanter KR, **Kirshbom PM**, Forbess JM. Use of Nesiritide (Human B-Type Natriuretic Peptide) in infants following cardiac surgery. *Pediatr Cardiol*, 25(6): 668-670, 2004.
30. Kanter KR, Vincent RN, Berg AM, Mahle WT, Forbess JM, **Kirshbom PM**. Cardiac retransplantation in children. *Ann Thorac Surg*, 78(2):644-649, 2004.

31. Mahle WT, Lundine K, Kanter KR, Forbess JM, **Kirshbom PM**, Tosone SR, Vincent RN. The short term effects of cardiopulmonary bypass on neurologic function in children and young adults. *Eur J Cardiothorac Surg*, 26(5): 920-925, 2004.
32. **Kirshbom PM**, Kogon BE. Tetralogy of Fallot with absent pulmonary valve syndrome. *Semin Thorac Cardiovasc Surg Pediatr Card Surg Annual*, 7(1):65-71, 2004.
33. **Kirshbom PM**, Flynn TB, Clancy RR, Ittenbach RF, Hartman DM, Paridon SM, Wernovsky G, Spray TL, Gaynor JW. Late neurodevelopmental outcome following repair of total anomalous pulmonary venous connection, *J Thorac Cardiovasc Surg*, 129(5):1091-1097, 2005.
34. Mahle WT, Forbess JM, **Kirshbom PM**, Cuadrado A, Simsic J, Kanter KR. Cost-utility analysis of salvage cardiac extracorporeal membrane oxygenation in children, *J Thorac Cardiovasc Surg*, 129(5):1084-1090, 2005.
35. Simsic JM, Cuadrado A, **Kirshbom PM**, Kanter KR, Ramaswamy D, Clabby M, Forbess JM. Novel management strategy for severe cyanosis after Sano modification of the Norwood procedure, *J Thorac Cardiovasc Surg*, 129(6):1450-1451, 2005.
36. Kanter KR, Forbess JM, **Kirshbom PM**. Redo mitral valve replacement in children. *Ann Thorac Surg*, 80:642-646, 2005.
37. Mahle WT, Cuadrado AR, **Kirshbom PM**, Kanter KR, Simsic JM. Nesiritide in infants and children with congestive heart failure. *Pediatr Crit Care Med*, 6(5):543-546, 2005.
38. Kerendi F, Halkos ME, Kin H, Corvera JS, Brat DJ, Wagner MB, Vinten-Johansen J, Zhao ZQ, Forbess JM, Kanter KR, Kelley ME, **Kirshbom PM**. Upregulation of hypoxia inducible factor is associated with attenuation of neuronal injury in neonatal piglets undergoing deep hypothermic circulatory arrest. *J Thorac Cardiovasc Surg*, 130(4):1079, 2005.
39. Kerendi F, **Kirshbom PM**, Halkos ME, Wang NP, Kin H, Jiang R, Zhao ZQ, Kanter KR, Guyton RA, Vinten-Johansen J. Cobalt chloride pretreatment attenuates myocardial apoptosis following hypothermic circulatory arrest. *Ann Thorac Surg*, 81(6):2055-2062, 2006.
40. Simsic JM, Cuadrado A, **Kirshbom PM**, Kanter KR. Risk adjustment for congenital heart surgery (RACHS): Is it useful in a single center series of newborns as a predictor of outcome in a high-population?. *Congenit Heart Dis.*, 1:148-151, 2006.
41. Thourani VH, **Kirshbom PM**, Kanter KR, Simsic J, Kogon BE, Wagoner S, Dykes F, Fortenberry J, Forbess JM. Venoarterial extracorporeal membrane oxygenation (VA-ECMO) in pediatric cardiac support. *Ann Thorac Surg*, 82(1): 138-144, 2006.
42. **Kirshbom PM**, Miller BE, Spitzer K, Easley KA, Spainhour CE, Kogon BE, Kanter KR. Failure of surface-modified bypass circuits to improve platelet function during pediatric cardiac surgery. *J Thorac Cardiovasc Surg*, 132(3): 675-680, 2006.
43. Kanter KR, **Kirshbom PM**, Kogon BE. Redo aortic valve replacement in children. *Ann Thorac Surg*, 82:1594-1597, 2006.

44. **Kirshbom PM**, Forbess JM, Kogon BE, Simsic JM, Kim DW, Raviele AA, Kanter KR, Vincent RN. Cerebral near-infrared spectroscopy is a reliable marker of systemic perfusion in awake single ventricle children. *Ped Cardiology*, 28(1):42-45, 2007.
45. Tanel RE, **Kirshbom PM**, Paridon SM, Hartman DM, Burnham NB, McBride MG, Ittenbach RF, Spray TL, Gaynor JW. Long-term noninvasive arrhythmia assessment after total anomalous pulmonary venous connection repair. *Am Heart J*, 153(2):267-274, 2007.
46. Simsic JM, Kanter KR, **Kirshbom PM**, Cuadrado A. Does preoperative mechanical ventilation affect outcomes in neonates undergoing cardiac surgery? *Cardiol Young*, 17(1):90-94, 2007.
47. McBride MG, **Kirshbom PM**, Gaynor JW, Ittenbach RF, Wernovsky G, Clancy RR, Flynn TB, Hartman DM, Spray TL, Tanel RE, Santiago MC, Paridon SM. Late cardiopulmonary and musculoskeletal exercise performance after repair for total anomalous pulmonary venous connection during infancy. *J Thorac Cardiovasc Surg*, 133:1533-1539, 2007.
48. Kogon BE, Butler H, McConnell M, Leong T, Kirshbom PM, Kanter KR. What is the optimal time to repair atrioventricular septal defect and common atrioventricular valvar orifice? *Cardiol Young*, 17(4):356-359, 2007.
49. Kanter KR, Mahle WT, Kogon BE, Kirshbom PM. What is the optimal management of infants with coarctation and ventricular septal defect? *Ann Thorac Surg*, 84(2):612-618, 2007.
50. Kogon B, Voss J, Villari C, Shah N, Spitzer K, Moore M, McGoldrick AM, Kirshbom P, Kanter K. Utility of intravenous catheters for femoral arterial cannulation in infants having complicated sternal re-entry. *J Thorac Cardiovasc Surg*, 134(3):746-749, 2007.
51. McAlvin B, Clabby ML, Kirshbom PM, Kanter KR, Kogon BE, Mahle WT. Routine immunizations and adverse events in infants with single-ventricle physiology. *Ann Thorac Surg*, 84:1316-1319, 2007.
52. Kogon B, Villari C, Shah N, Kirshbom P, Kanter K, Kim D, Raviele A, Vincent R. Occlusion of the modified Blalock-Taussig shunt: unique methods of treatment and review of catheter-based intervention. *Congenit Heart Dis* 2007 May;2(3):185-90.
53. Kogon BE, Forbess JM, Wulkan ML, Kirshbom PM, Kanter KR. Video-assisted thoracoscopic surgery: is it a superior technique for the division of vascular rings in children? *Congenit Heart Dis* 2007 March;2(2):130-3.
54. Kogon BE, Ramaswamy V, Todd K, Plattner C, Kirshbom PM, Kanter KR, Simsic J. Feeding difficulty in newborns following congenital heart surgery. *Congenit Heart Dis* 2007 September;2(5):332-7.
55. Kogon BE, Rodby KA, Kirshbom PM, Kanter KR, Lyle T, McConnell M, Book WM. Adult congenital pulmonary valve replacement: a simple, effective, and reproducible technique. *Congenit Heart Dis* 2007 September;2(5):314-8.
56. Kogon BE, Butler H, McConnell M, Leong T, Kirshbom PM, Kanter KR. What is the optimal time to repair atrioventricular septal defect and common atrioventricular valvar orifice? *Cardiol Young* 2007 August;17(4):356-9.
57. Kogon B, Butler H, Kirshbom P, Kanter K, McConnell M. Closure of symptomatic ventricular septal defects: how early is too early? *Pediatr Cardiol* 2008 January;29(1):36-9.

58. Simsic JM, Masterson K, Kogon BE, Kirshbom PM, Kanter KR. Pre-Hospital Discharge Car Safety Seat Testing in Infants Following Congenital Heart Surgery. *Pediatr Cardiol* 2008 March;29(2):313-6.

Book Chapters:

1. **Kirshbom PM** and Tyler DS. Neuroendocrine tumors: Management of hepatic metastatic disease. In: *Malignant Liver Tumors: Current and Emerging Therapies*. Clavien PA ed., Blackwell Science, Inc., Malden, 1999.
2. **Kirshbom PM**. The vascular system. In: *Handbook of Surgical Intensive Care, 5th Edition*. Milano C and Clary B, eds., Mosby, London, 2000.
3. **Kirshbom PM** and Harpole DH. Bronchial gland tumors. In: *Thoracic Surgery, 2nd Edition*. Pearson FG, Cooper JD, Deslauriers J, et al, eds., Churchill Livingstone, Philadelphia, 2002.
4. **Kirshbom PM**, Jagers JJ, and Ungerleider RM. Total anomalous pulmonary venous connection. In: *Pediatric Cardiac Surgery*. Mavroudis C and Backer CL, eds., Mosby, Philadelphia, 2003.
5. **Kirshbom PM** and Spray TL. Hypoplastic left heart syndrome. In: *Current Therapy in Thoracic and Cardiovascular Surgery*. Yang SC and Cameron D eds., Mosby, 2004.
6. Karl TR, **Kirshbom PM**, and Horton SB. Mechanical circulatory support in children. In: *Critical Heart Disease in Infants and Children, 2nd edition*. Nichols D, Cameron D, et al eds., Mosby, Philadelphia, 2006.
7. Karl TR and **Kirshbom PM**. Transposition of the great arteries. In: *Critical Heart Disease in Infants and Children, 2nd edition*. Nichols D, Cameron D, et al eds., Mosby, Philadelphia, 2006.
8. **Kirshbom PM**, Gaynor JW, and Spray TL. Heart and lung transplantation. In: *Critical Heart Disease in Infants and Children, 2nd edition*. Nichols D, Cameron D, et al eds., Mosby, Philadelphia, 2006.

Abstracts:

1. **Kirshbom PM**, Skaryak LA, DiBernardo LR, Kern FH, Greeley WJ, Gaynor JW, Ungerleider RM: Aortopulmonary collaterals decrease the rate of cerebral cooling and alter regional cerebral perfusion during cardiopulmonary bypass. Surgical Forum of the 80th Clinical Congress of the American College of Surgeons, Chicago, Illinois, October, 1994.
2. Skaryak LA, **Kirshbom PM**, DiBernardo LR, Kern FH, Greeley WJ, Ungerleider RM, Gaynor JW: Low flow bypass versus circulatory arrest: Similar vulnerability to post-bypass cerebral metabolic injury. Surgical Forum of the 80th Clinical Congress of the American College of Surgeons, Chicago, Illinois, October, 1994.
3. **Kirshbom PM**, Skaryak LA, DiBernardo LR, Kern FH, Greeley WJ, Gaynor JW, Ungerleider RM: Aortopulmonary collaterals may increase cerebral injury following circulatory arrest. 67th Scientific Sessions of the American Heart Association, Dallas, Texas, November, 1994.

4. Skaryak LA, **Kirshbom PM**, DiBernardo LR, Kern FH, Greeley WJ, Ungerleider RM, Gaynor JW: Modified ultrafiltration decreases cerebral injury following low flow bypass. 67th Scientific Sessions of the American Heart Association, Dallas, Texas, November, November, 1994.
5. **Kirshbom PM**, Tsui SSL, DiBernardo LR, Meliones JM, Schwinn DA, Ungerleider RM, Gaynor JW: Blockade of endothelin converting enzyme significantly reduces pulmonary hypertension after cardiopulmonary bypass and circulatory arrest. 56th Annual Meeting of the Society of University Surgeons, Denver, Colorado, February, 1995.
6. **Kirshbom PM**, Tsui SSL, DiBernardo LR, Meliones JN, Schwinn DA, Ungerleider RM, Gaynor JW: Pulmonary vascular endothelium is capable of producing nitric oxide after cardiopulmonary bypass and circulatory arrest. 44th Annual Scientific Session of the American College of Cardiology, New Orleans, Louisiana, March, 1995.
7. Tsui SSL, **Kirshbom PM**, Davies MJ, Jacobs MT, Greeley WJ, Kern FH, Gaynor JW, Ungerleider RM. Nitric oxide production influences recovery of cerebral perfusion and cerebral metabolism following deep hypothermic circulatory arrest in neonatal piglets. 42nd Annual Meeting of the Southern Thoracic Surgical Association, San Antonio, Texas, November, 1995.
8. DiBernardo LR, **Kirshbom PM**, Skaryak LA, Quarterman RL, Johnson RJ, Gaynor JW, Ungerleider RM. Acute functional consequences of left ventriculotomy. 42nd Annual Meeting of the Southern Thoracic Surgical Association, San Antonio, Texas, November, 1995.
9. Tsui SSL, **Kirshbom PM**, Davies MJ, Jacobs MT, Greeley WJ, Ungerleider RM. Thromboxane A₂-receptor blockade improves cerebral protection for deep hypothermic circulatory arrest. 10th Annual Meeting of the European Association for Cardiothoracic Surgery, Prague, Czech Republic; October, 1996.
10. **Kirshbom PM**, Page SO, Jacobs MT, Tsui SSL, Bello EA, Ungerleider RM, Schwinn DA, Gaynor JW. Circulatory arrest increases endothelin-1 production in the pulmonary artery and receptor expression in the lung. Surgical Forum of the 82nd Annual Clinical Congress of the American College of Surgeons, San Francisco, California, October, 1996.
11. Skaryak LA, **Kirshbom PM**, DiBernardo LR, Kern FH, Greeley WJ, Ungerleider RM, Gaynor JW. Modified ultrafiltration improves cerebral metabolic recovery after circulatory arrest. 74th Annual Meeting of the American Association for Thoracic Surgery, New York, New York, April, 1996.
12. **Kirshbom PM**, Kherani AR, Onaitis MW, Feldman JM, Tyler DS. Carcinoids of unknown primary: comparative analysis with foregut, midgut, and hindgut carcinoids. 19th Annual Meeting of the American Association of Endocrine Surgeons, Orlando, Florida, April, 1998.
13. **Kirshbom PM**, Kherani AR, Onaitis MW, Kehoe TE, Feldman C, Feldman JM, Tyler DS. Foregut carcinoids: A clinical and biochemical analysis. 20th Annual Meeting of the American Association of Endocrine Surgeons, New Haven, Connecticut, May, 1999.
14. Jagers JJ, Forbess J, Meliones J, **Kirshbom PM**, Miller C, Ungerleider RM. Extracorporeal membrane oxygenation (ECMO) for postcardiotomy failure in children: Significance of shunt management in the single ventricle. 46th Annual Meeting of the Southern Thoracic Surgical Association, Puerto Rico, November, 1999.

15. **Kirshbom PM**, Myung RJ, Bridges ND, Gaynor JW, Clark BJ, Spray TL. Use of ECMO as a bridge to heart transplantation in children. 3rd World Congress of Pediatric Cardiology and Cardiac Surgery, Toronto, May, 2001.
16. **Kirshbom PM**, Myung RJ, Gaynor JW, Paridon SM, DeCampi WM, Karl TR, Spray TL. Neonatal presentation of total anomalous pulmonary venous connection predicts long-term functional outcome. 38th Annual Meeting of the Society of Thoracic Surgeons, Fort Lauderdale, Florida, January, 2002.
17. Myung RJ, **Kirshbom PM**, Petko M, Golden JA, Judkins AR, Ittenbach RF, Spray TL, Gaynor JW. Modified ultrafiltration does not improve neurologic outcome following deep hypothermic circulatory arrest. 16th Annual Meeting of the European Association for Cardiothoracic Surgery, Monte Carlo, Monaco, September, 2002.
18. Kanter KR, Forbess JM, Fyfe DA, Mahle WT, **Kirshbom PM**. DeVega tricuspid annuloplasty for systemic tricuspid regurgitation in children with univentricular physiology. 2nd Biennial Meeting of The Society for Heart Valve Disease, Paris, July, 2003.
19. Kanter KR, Forbess JM, **Kirshbom PM**, Miller BE, Tosone SR, Guzzetta NA, Cuadrado AR, Spitzer KK. Resuscitation on cardiopulmonary bypass in children; An alternative to rapid response ECMO. 17th Annual Meeting of the European Association for Cardiothoracic Surgery, Vienna, October, 2003.
20. Kanter KR, Vincent RN, Berg AM, Mahle WT, Forbess JM, **Kirshbom PM**. Cardiac retransplantation in children. 50th Annual Southern Thoracic Surgical Association Meeting, Bonita Springs, FL, November, 2003.
21. Mahle WT, Lundine K, Kanter KR, Forbess JM, **Kirshbom PM**, Tosone SR, Vincent RN, Burns TG. Evaluation of the short-term effects of cardiopulmonary bypass on neurologic function in children. American Heart Association Scientific Sessions, New Orleans, November, 2003.
22. **Kirshbom PM**, Flynn TB, Ittenbach RF, Hartman DM, Burnham NB, Tanel RE, Paridon SM, Spray TL, Wernovsky G, Gaynor JW. Neurodevelopmental outcome after repair of total anomalous pulmonary venous connection. American College of Cardiology Annual Scientific Session, New Orleans, March, 2004.
23. Tanel RE, Paridon SM, **Kirshbom PM**, Hartman DM, Burnham NB, Ittenbach RF, Spray TL, Gaynor JW. Long-term noninvasive electrophysiologic assessment after repair of total anomalous pulmonary venous connection. American College of Cardiology Annual Scientific Session, New Orleans, March, 2004.
24. Kanter KR, Berg AM, Vincent RN, Mahle WT, Forbess JM, **Kirshbom PM**. Congenital category is not a risk factor for pediatric heart transplantation. 24th Annual International Society of Heart and Lung Transplantation, San Francisco, April, 2004.
25. Thourani VH, **Kirshbom PM**, Kanter KR, Simsic J, Kogon BE, Wagoner S, Dykes F, Fortenberry J, Forbess JM. Venoarterial extracorporeal membrane oxygenation for pediatric cardiac support: cannulation during cardiopulmonary resuscitation is not a risk factor for mortality. 51st Annual Southern Thoracic Surgical Association Meeting, Cancun, November, 2004.
26. Kanter KR, Forbess JM, **Kirshbom PM**. Redo mitral valve replacement in children. 51st Annual Southern Thoracic Surgical Association Meeting, Cancun, November, 2004.

27. Kerendi F, Halkos ME, Kin H, Corvera JS, Brat DA, Wagner M, Zhao ZQ, Forbess JM, Vinten-Johansen J, Kanter KR, **Kirshbom PM**. Upregulation of hypoxia inducible factor (HIF-1a) is neuroprotective in neonatal piglets undergoing deep hypothermic circulatory arrest. American Heart Association Scientific Sessions, New Orleans, November, 2004.
28. Mahle WT, **Kirshbom PM**, Cuadrado A, Simsic J, Forbess JM, Kanter KR. Cost-utility of salvage cardiac ECMO. American Heart Association Scientific Sessions, New Orleans, November, 2004.
29. Kanter KR, **Kirshbom PM**, Kogon BE. Redo aortic valve replacement in children. 41st Society of Thoracic Surgeons Meeting, Tampa, January, 2005.
30. Kerendi F, **Kirshbom PM**, Halkos ME, Wang NP, Kin H, Jiang R, Zhao ZQ, Guyton RA, Vinten-Johansen J. Pretreatment with cobalt chloride enhances myocyte survival following deep hypothermic circulatory arrest via phosphorylation of Akt and alteration of the Bcl-2/Bax ratio. 41st Society of Thoracic Surgeons Meeting, Tampa, January, 2005. Recipient of the Thoracic Surgery Directors Association Resident Research Award.
31. Kogon BE, **Kirshbom PM**, Kanter KR. Video-assisted thoracoscopic surgery: Is it a superior technique for the division of vascular rings in children? 31st Annual Meeting of the Western Thoracic Surgical Association, Victoria, British Columbia, June, 2005.
32. Simsic JM, Dambinova S, Izykenova G, Mahle WT, **Kirshbom PM**, Bokesch PM. Infants with congenital heart disease have elevated biochemical markers of brain injury prior to cardiac surgery. 4th International Conference on Biomarkers for Brain Damage. Boothbay Harbor, Maine, September 2005.
33. **Kirshbom PM**, Miller BE, Spitzer K, Spainhour CE, Kogon BE, Kanter KR. Surface modified cardiopulmonary bypass circuits do not significantly improve platelet number or function during pediatric cardiac surgery. 42nd Society of Thoracic Surgeons Meeting, Chicago, IL, 2006.
34. **Kirshbom PM**, Forbess JM, Kogon BE, Simsic JM, Kim DW, Raviele AA, Kanter KR, Vincent RN. Near infra-red spectroscopy is a reliable indicator of systemic perfusion for unsedated infants with single ventricle physiology. American College of Cardiology 55th Annual Scientific Session, Atlanta, March 2006.
35. Pusca SV, Kanter KR, **Kirshbom PM**, Kogon BE, Clabby ML, Mahle WT, Fyfe DA. Freedom from neo-aortic insufficiency: A comparison of classic Norwood and Norwood-Sano procedures. American College of Cardiology 55th Annual Scientific Session, Atlanta, March 2006.
36. Rubio A, Jerrell N, **Kirshbom P**, Simsic J, Cuadrado A, Kanter K, Maher K. Infections in the pediatric surgical patient, a comparison of intraoperative vs delayed sternal closure following the Norwood procedure. 39th Annual Southeast Pediatric Cardiology Society Meeting, Atlanta, April 2006.
37. Kanter KR, Mahle WT, Kogon BE, **Kirshbom PM**. What is the optimal management of infants with coarctation and ventricular septal defect? 53rd Annual Meeting of the Southern Thoracic Surgical Association, Tucson, AZ, November 2006.
38. McAlvin B, Clabby ML, **Kirshbom PM**, Kanter KR, Kogon BE, Mahle WT. Should routine immunizations be deferred in infants with single ventricle? The American Heart Association Scientific Sessions, Chicago, IL, November 2006.

39. **Kirshbom PM**, Mahle WT, Potter EH, Joyner RW, Kogon BE, Kanter KR, Bouzyk MM. Angiotensinogen M235T polymorphism is associated with single ventricle morphology. The American Heart Association Scientific Sessions, Chicago, IL, November 2006.
40. **Kirshbom PM**, Mahle WT, Joyner RW, Kogon BE, Kanter KR, Bouzyk MM. Evaluation of genetic factors affecting transplant-free survival in single ventricle patients. The 43rd Annual Society of Thoracic Surgeons Meeting, San Diego, CA, January 2007.
41. Maxey TS, Mahle WT, Eldaif SM, Kogon BE, Kanter KR, Bouzyk MM, **Kirshbom PM**. Endothelial nitric oxide synthase G894T polymorphism impacts vascular resistance and long-term outcome for single ventricle patients. The 87th Annual Meeting of the American Association for Thoracic Surgery, Washington, DC, May 2007.
42. Kanter KR, Mahle WT, **Kirshbom PM**, Kogon BE. Aortic annular reinforcement as a method of reducing late annular dilatation and aortic insufficiency after the Ross procedure in children. 4th Biennial Meeting of the Society for Heart Valve Disease, New York, June 2007.
43. Simsic J, Coleman K, Cuadrado A, Kirshbom P, Maher K. Do neonates with genetic abnormalities have increased morbidity and mortality following cardiac surgery? American Academy of Pediatrics, San Francisco, October, 2007.
44. Kogon B, Kirshbom P, Kanter K, Leong T, Lyle T, Jennings S, McConnell M, Book W. Risk factors for early pulmonary valve replacement in congenital pulmonary stenosis and tetralogy of Fallot. American Heart Association, Orlando, November, 2007.
45. Wagner MB, Wiegerinck RF, Cojoc A, Zeidenweber CM, Ding G, Kanter KR, **Kirshbom PM**, Kogon BE, Joyner RW. Depressed force frequency relationship in ventricular tissue from children with hypoplastic left heart syndrome. American Heart Association, November, 2007.
46. Joyner RW, Wiegerinck RF, Ding G, Zeidenweber CM, Parachuru L, Kanter KR, **Kirshbom PM**, Kogon BE, Wagner MB. Disparate effect of isoproterenol on contractility and calcium current in ventricle from hypoplastic left heart syndrome patients. American Heart Association, November, 2007.
47. Phelps HM, Mahle WT, Simsic JM, **Kirshbom PM**, Kanter KR, Maher SO. Low cerebral oxygenation by near infrared spectroscopy predicts adverse outcome following the Norwood procedure for hypoplastic left heart syndrome. American College of Cardiology, March, 2008.
48. Kerendi F, Kramer ZB, Mahle WT, Kogon BE, Kanter KR, **Kirshbom PM**. Perioperative risks and outcomes of atrioventricular valve surgery in conjunction with Fontan procedure. 55th Annual Southern Thoracic Surgical Association, Austin, TX, November, 2008.

Invited Presentations:

1. Optimization of the neonatal reponse to cardiopulmonary bypass and circulatory arrest. Presented at the 56th Annual Meeting of the Japanese Thoracic Surgeons Association, Tokyo, Japan, November, 2003.
2. Coated circuits in pediatric cardiopulmonary bypass. 17th Annual ELSO Conference, Atlanta, September, 2006.