

DUKE UNIVERSITY MEDICAL CENTER

CURRICULUM VITAE

James Jagers, M.D.

Date printed: March 9, 2010

Primary academic appointment: Surgery
Secondary academic appointment: Pediatrics

Date and rank of first Duke faculty appointment: July 1, 1996

Current Academic Rank: Associate Professor of Surgery and Pediatrics with tenure

Medical licensure:	License:	Issue date:
North Carolina (active)	#96-00954	9/10/1996
Virginia (active)	#0101233662	10/02/2002

Specialty certification(s):

Diplomate American Board of Surgery; May 10, 1994, #39329

Diplomate American Board of Thoracic Surgery; June 6, 1997, #5966, Renewed 2007

Date of birth: September 10, 1963 **Place:** Alliance, NE

<u>Education:</u>	<u>Institution</u>	<u>Date</u>	<u>Degree</u>
High School	Alliance High School	6/81	HS diploma
College	Chadron State College	8/81 – 5/84	
	University of Nebraska	8/84 – 5/88	BS
Graduate or Professional	University of Nebraska	8/84 – 5/88	MD

Professional training and academic career:

<u>Institution</u>	<u>Position/Title</u>	<u>Dates</u>
Oregon Health Sciences University	General Surgery Residency	7/1/88-6/31/93
University of Colorado Health Sciences Center	Thoracic Surgery Residency	7/1/93-6/31/96
The Children's Hospital Denver, CO	Post Graduate Fellowship Congenital Cardiac Surgery	7/1/93-12/31/93 1/1/95-6/31/96

Other

American College of Surgeons, Joint Leadership Program in Health Policy & Management, Brandeis University, May 15-20, 2005

Clinical activity - type of practice and estimate of time commitment:

Congenital cardiac surgery – 75%
Administration of Cardiovascular program 15%
Research 10%

Participation in academic and administrative activities of the University and Medical Center:

Co Director Pediatric Heart Center DUMC
Surgical director – Pediatric Cardiac Intensive Care
Surgical director – ECMO Program

Teaching responsibilities including continuing education:

Core course – General Surgery for medical students
Cardiothoracic Surgery Resident and Fellow teaching
Core course instruction for Pediatric Cardiology Fellows and Pediatric cardiac ICU nurses

<u>External support - gifts, grants, and contracts:</u>	<u>Amount</u>	<u>Duration</u>
Pediatric Heart Network: Single Ventricle reconstruction Extension Trial Site Co-Investigator Site Principle Investigator Jennifer Li MD Source NHLBI		2007-present
Cross Species Analysis of myocardial susceptibility to peri-operative stress. Co-Investigator Principle Investigator: Mihai Podgoreanu MD NIH Priority Score 158	\$1,948,974	
Decreased Myocardial Calsarcin-1 Contributes to the Development of Cardiac Failure in a Model of Right Ventricular Hypertrophy Co-Principle Investigator with Cindy Barrett M.D. Source: Children's Miracle Network Grant	\$25,000	01/06-12/07
Trial of right ventricular vs. modified Blalock-Taussig shunt in infants with single ventricle defect undergoing staged reconstruction (single ventricle reconstruction trial) Co-Principle Investigator Source: NIH Grant #U01 HL068269-04	\$3000±/ patient	9/01 – 8/06
Research in Blood Conservation in Cardiothoracic Surgery: Proteomic Analysis of a Prothrombotic State induced by infant cardiopulmonary bypass. Co-Investigator Source: Bayer Pharmaceutical Research	\$25,000	7/04-7/05
The Neonatal Heart and Cardiopulmonary Bypass Co-investigator Source: NIH 5 R01 HL63937	\$1,925,000	9/00 – 06/05
Research in Blood Conservation in Cardiothoracic Surgery: The effects of Aprotinin, and Protease Activated Receptors (PAR's) on endothelial cell coagulation biology. Co- investigator Source: Bayer Pharmaceutical Research	\$25,000	7/02 – 07/03
Neonatal Cardiopulmonary Bypass: A Procoagulant State Principal Investigator Bayer Pharmaceutical Research in Blood Conservation Original Amount: Renewed: Purpose: This grant is an investigation of the potential prothrombotic effects of the inflammation associated with cardiopulmonary bypass	\$25,000 \$10,000	1997-98 1998-99
Evaluation of the Safety and Efficacy of Septrafilm II® Adhesion Barrier in Pediatric and Cardiac Surgery Principal Investigator Source: Genzyme Corporation Purpose: Safety and efficacy trial of Septrafilm in the prevention of adhesions following cardiac operations in children	\$2500/patient	1998-1999

Publications:

Refereed journals:

1. Sheikh A, Barrett C, Villamizar N, Valente A, Herlong R, Craig, D, Lawson J, Lodge A, **Jagers J**. Right Ventricular hypertrophy with early dysfunction, A neonatal Model, J Thorac and Cardiovasc Surg; 2009; 137: 1146-1153.
2. Swaminathan M, Stuart M, Hughes GC, **Jagers J**, Hill SE, Milano CA, and Bennett-Guerrero E. Institutional response to FDA warning on aprotinin and impact on outcomes. HSR Proceedings, Intensive Care/Cardiovasc Anesthesia, 2009 (in press).
3. Drinker LR, Camitta M, Herlong R, Miller S, Lodge A, **Jagers J**, Barker P, Use of Monoplane intracardiac imaging probe in high risk infants during congenital heart surgery, Echocardiography 2008; 25: (9) 999-1003.
4. Ohye R, Gaynor W, Ghanayem N, Goldberg C, Lausen P, Frommelt P, Newburger J, Pearson G, Tabbutt S, Wernovsky G, Wruck L, Atz A, Colan S, **Jagers J**, McCrindle B, Prakash A, Puchalski M, Sleeper L, Styliano L, Mahony L, Design and Rational of a randomized trial comparing the blalock-taussig and right ventricle to pulmonary artery shunt in the Norwood procedure. J Thorac Cardiovasc Surg, 2008;136:968-975.
5. Cooper DS, Jacobs JP, Chai PJ, **Jagers J**, Barach P, Beekman III RH, Krogmann O, Manning P. Pulmonary complications associated with the treatment of patients with congenital cardiac disease: Consensus definition from the Multi-Societal Database Committee for Pediatric and Congenital Heart Disease. In: 2008 Cardiology in the Young Supplement: Data bases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease. Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Jeffrey P. Jacobs, MD (editor). Cardiology in the Young, 12/9/2008; Vol 18; Issue S2 (Suppl2), pp 215-221.
6. Lawson, DS, Lawson AF, Walczak R, McRobb C, McDermott P, Shearer IR, Lodge AJ, **Jagers J**. North American neonatal extracorporeal membrane oxygenation (ECMO) devices and team roles: 2008 survey results of Extracorporeal Life Support Organization (ELSO) Centers. JECT, 2008; 40: 166-174.
7. Lawson DS, Smigla GR, McRobb CM, Walczak R, Kaemmer D, Shearer IR, Lodge AJ, **Jagers J**. A clinical evaluation of the Dideco Kids D100 neonatal oxygenator. Perfusion, 2008;22:39-42.
8. **Jagers J** and Pal J. Surgical therapy for anomalous aortic origin of the coronary arteries. Operative Techniques in Thoracic and Cardiovasc Surg: A Comparative Atlas, 2008;13; 26-34.
9. Gaca AM, **Jagers J**, Dudley T, Bissett GS. Repair of congenital heart disease: A primer, Part 1. Radiology, 2008, (published online before print).
10. Gaca AM, **Jagers J**, Dudley LT, Bissett GS. Repair of congenital heart disease: A primer, Part 2. Radiology, 2008, (published online before print).
11. Curzon CL, Milford-Beland S, Li JS, O'Brien SM, Jacobs JP, Jacobs ML, Welke KF, Lodge AJ, Peterson ED, **Jagers J**. Cardiac surgery in infants with low weight is associated with increased mortality: Analysis of the Society of Thoracic Surgeons Congenital Heart Base. J Thorac Cardiovasc Surg, 2008; 546-551.
12. Kanter RJ, Darden W, Herlong R, Barker P, Jagers J, A patient with congenital heart disease and ventricular tachycardia; What is the course of the device lead. Pacing Clin Electrophysiol. 2007;11: 1401-1403.
13. Li JS, Yow E, Berezny KY, Rhodes JF, Bokesch PM, Charpie JR, Forbus GA, Mahony L, Boshkov L, Lambert V, Bonnet D, Michel-Behnke I, Graham TP, Takahashi M, **Jagers J**, Califf RM, Rakhit A, Fontecave S, Sanders SP. Clinical outcomes of palliative surgery including a systemic-to-pulmonary artery

- shunt in infants with cyanotic congenital heart disease: Does aspirin make a difference? *Circulation*, 2007;116:293-297.
14. Baig K, Nassar R, Craig DM, Quick G Jr, Jiang HX, Frank MM, Lodge AJ, Anderson PAW, **Jagers J**. Complement factor 1 inhibitor improves cardiopulmonary function in neonatal cardiopulmonary bypass. *Ann Thorac Surg*, 2007;83:1477-1483.
 15. Sheikh AM, Barrett C, Villamizar N, Alzate O, Miller S, Shelburne J, Lodge AJ, Lawson J, **Jagers J**. Proteomics of brain injury in a neonatal model of deep hypothermic circulatory arrest. *J Thorac Cardiovasc Surg*, 2006;Oct;132(4):820-8
 16. Li, J.S., **Jagers J**, Anderson P.A.W., The use of TP10, soluble complement receptor 1, in cardiopulmonary bypass, *Expert Rev in Cardiovasc Ther* 2006; 4(5), 649-654.
 17. Lima B, Hughes GC, Lemaire A, **Jagers J**, Glower DD, Wolfe WG. Short-term outcomes of aortic root replacement with St Jude® mechanical conduits and aortic allografts. *Ann Thorac Surg* 2006;82:579-85.
 18. **Jagers J**, Lawson JH. Coagulopathy and inflammation in neonatal heart surgery: Mechanisms and strategies. *Ann Thorac Surg* 2006;81:S2360-6.
 19. Walczak R, Lawson DS, Kaemmer D, McRobb C, McDermott P, Smigla G, Shearer I, Lodge A, **Jagers J**. Evaluation of a preprimed microporous hollow-fiber membrane for rapid response neonatal extracorporeal membrane oxygenation. *Perfusion* 2005;20:269-275
 20. **Jagers J**, Lodge AJ. Surgical therapy for anomalous aortic origin of the coronary arteries. *Semin Thorac Cardiovasc Surg Pediatr Card Surg Annu*, 2005;122-7. Review
 21. Lawson DS, Ing R, Cheifetz IM, Walczak R, Craig D, Schulman SR, Kern FH, Shearer IR, Lodge AJ, **Jagers J**. Hemolytic characteristics of three commercially available centrifugal blood pumps. *PCCM* 2005;6(5):573-577.
 22. Williams EA, Ing RJ, Hart JP, **Jagers J**, Kern FH, Craig DM, Pizzo SV. Soluble alpha₂macroglobulin receptor is increased in endotracheal aspirates from infants and children after cardiopulmonary bypass. *J Thorac Cardiovasc Surg* 2005;129:1098-1103.
 23. **Jagers J**, Balsara K. Mediastinal masses in children. *Semin Thorac Cardiovasc Surg*, 2004 Fall;16(3):201-8. Review.
 24. Lawson DS, Smigla GR, Shearer IR, Ing R, Schulman S, Kern F, **Jagers J**. A clinical comparison of two commercially available pediatric hemoconcentrators. *J Extra Corpor Technol* 2004;36:66-68.
 25. Li JS, Sanders SP, Perry AE, Stinnett SS, **Jagers J**, Bokesh P, Reynolds L, Nassar R, Anderson PAW. Pharmacokinetics and safety of TP10, soluble complement receptor 1, in infants undergoing cardiopulmonary bypass. *Am Ht J* 2004;147:173-180.
 26. Gandy KL, Rebeiz AG, Wang A, **Jagers J**. Left main coronary artery-to-pulmonary artery fistula with severe aneurysmal dilatation. *Ann Thorac Surg* 2004;77:1081-1083.
 27. Ing RJ, Lawson DS, **Jagers J**, Schulman S, Shearer IR, Kern FH. Detection of unintentional partial superior vena cava occlusion during a bidirectional cavopulmonary anastomosis. *J Cardiothorac Vasc Anesth* 2004;18(4):472-474.
 28. Smigla GR, Lawson DS, Shearer IR, **Jagers J**, Milano CA, Welsby IJ. An ultrafiltration technique for directly re-infusing residual cardiopulmonary bypass blood. *J Extra Corpor Technol* 2004;36:231-234.

29. Lawson DS, Walczak R, Lawson AF, Shearer IR, Ing R, Schulman S, Kern F, **Jagers J**. North American neonatal extracorporeal membrane oxygenation (ECMO) devices: 2002 survey results. *J Extra Corpor Technol* 2004;36:16-21.
30. Markert ML, Sarzotti M, Ozaki DA, Sempowski GD, Rhein ME, Hale LP, Le Deist F, Alexieff MA, Li J, Hauser ER, Haynes BF, Skinner MA, Rice HE, Mahaffey SM, **Jagers J**, Stein LD, Mill MR. Thymus transplantation in complete DiGeorge syndrome: Immunologic and safety evaluations in twelve patients. *Blood* 2003;102:1121-1130.
31. Romp RL, Herlong JR, Landolfo CK, Sanders SP, Miller CE, Ungerleider RM, **Jagers J**. Outcome of unroofing procedure for repair of anomalous aortic origin of left or right coronary artery. *Ann Thorac Surg* 2003;76:589-596.
32. Wang A, **Jagers J**, Ungerleider RM, Lim CS, Ryan T. Exercise echocardiographic comparison of pulmonary autograft and aortic homograft replacements for aortic valve disease in adults. *J Heart Valve Dis* 2003;12:202-208.
33. Forbess JM, Shah AS, St. Louis J, **Jagers J**, Ungerleider, RM. Cryopreserved homografts in the pulmonary position: Determinants of durability. *Ann Thorac Surg* 2001;71:54-60.
34. Darling EM, Kaemmer DD, Lawson DS, **Jagers J**, Ungerleider RM. Use of ECMO without the oxygenator to provide ventricular support after Norwood Stage I procedures. *Ann Thorac Surg* 2001;71:735-736.
35. Ungerleider RM, Johnston TA, O'Laughlin MP, **Jagers J**, Gaskin PR. Intraoperative stents to rehabilitate severely stenotic pulmonary vessels. *Ann Thorac Surg* 2001;71:476-481.
36. Davidson MJ, Jones M, Emani SM, Wilson KH, **Jagers J**, Koch WJ, Milano CA. Cardiac gene delivery with cardiopulmonary bypass. *Circulation* 2001;104(2):131-133.
37. **Jagers J**, Ungerleider RM. Cardiopulmonary bypass in infants and children. *Semin Thorac Cardiovasc Surg Pediatr Card Surg Annu.* 2000;3:92-109
38. Hilton AK, **Jagers J**, Mathew J. An unexpected flow abnormality. *J Cardiothorac Vasc Anes* 2000;14:347-349.
39. Herlong JR, **Jagers J**, Ungerleider RM. Congenital Heart Surgery Nomenclature and Database Project: Pulmonary venous anomalies. *Ann Thorac Surg* 2000; 69(Supp 1):S56-69. Review.
40. **Jagers J**, Cameron DE, Herlong JR, Ungerleider RM. Congenital Heart Surgery Nomenclature and Database Project: Transposition of the great arteries. *Ann Thorac Surg* 2000;69(Supp 1):S205-235. Review
41. Chai P, Nassar R, Oakeley AE, Craig DM, Quick G Jr, **Jagers J**, Sanders SP, Ungerleider RM, Anderson PAW. Soluble complement receptor-1 protects heart, lung, and cardiac myofilament function from cardiopulmonary bypass damage. *Circulation* 2000;101:541-546.
42. Langley S, Chai PJ, **Jagers J**, Ungerleider RM. The free radical spin trap α -phenyl-*tert*-butyl nitronne attenuates the cerebral response to deep hypothermic ischemia. *J Thorac Cardiovasc Surg* 2000;119:305-313.
43. Langley SM, Chai PJ, Tsui SS, **Jagers J**, Ungerleider RM. The effects of a leukocyte depleting filter on cerebral and renal recovery after deep hypothermic circulatory arrest. *J Thorac Cardiovasc Surg* 2000; 119:1262-1269.

44. Langley SM, Chai PJ, **Jagers J**, Ungerleider RM. Preoperative high dose methylprednisolone attenuates the cerebral response to deep hypothermic circulatory arrest. *Eur J Cardiothorac Surg* 2000;17:279-286.
45. **Jagers J**, Forbess J, Shah AS, Meliones JN, Kirshbom PM, Miller CE, Ungerleider RM: Extracorporeal membrane oxygenation for infant postcardiotomy support: Significance of shunt management. *Ann Thorac Surg* 2000;69:1476-1483.
46. Darling EM, Harris-Holloway S, Kern FH, Ungerleider RM, **Jagers J**, Lawson DS, Shearer IR. Impact of modifying priming components of fluid administration using miniaturized circuitry in neonatal cardiopulmonary bypass. *Perfusion*, 2000; 15: 3-12
47. Lau CL, Palmer SM, Posther KE, Howell DN, Reinsmoen NL, Massey HT, Tapson VF, **Jagers J**, D'Amico TA, Davis RD. Influence of panel-reactive antibodies on post-transplant outcomes in lung transplant recipients. *Ann Thorac Surg* 2000;69:1520-1524.
48. Milano CA, Shah AS, Van Trigt P, **Jagers J**, Davis RD, Glower DD, Higginbotham MB, Russell SD, Landolfo KP. Evaluation of early post-operative results following bicaval versus standard cardiac transplantation and review of the literature. *Am Heart J* 2000;140:717-721.
49. Lodge AJ, **Jagers J**, Adams DM, Rice HE. Vascular control for resection of suprahepatic intracaval Wilms' tumor: Technical considerations. *J Pediatr Surg* 2000;35(12)1836-1837.
50. Lodge AJ, Chai PJ, Daggett CW, Ungerleider RM, **Jagers J**. Methylprednisolone reduces the inflammatory response to cardiopulmonary bypass in neonatal piglets: Timing of dose is important. *J Thorac Cardiovasc Surg* 1999;117:515-522.
51. Langley SM, Chai PJ, Miller SE, Mault JR, **Jagers J**, Tsui SS, Lodge AJ, Lefurgey A, Ungerleider RM. Intermittent perfusion protects the brain during deep hypothermic circulatory arrest. *Ann Thorac Surg* 1999;68:4-12.
52. Jagers J, Neal M, Smith PK, Ungerleider RM, Lawson JH. Infant cardiopulmonary bypass: A procoagulant state. *Ann Thorac Surg* 1999;68:513-520.
53. Lau CL, Posther KE, Stephenson GR, Lodge AJ, Lawson JH, Darling EM, Davis RD, Ungerleider RM, **Jagers J**. Mini-circuit cardiopulmonary bypass with vacuum assisted venous drainage: Feasibility of an asanguineous prime in the neonate. *Perfusion* 1999;14:389-396.
54. Kirshbom PM, **Jagers J**, Ungerleider RM. Tetralogy of fallot with absent pulmonary valve: Simplified technique for homograft repair. *J Thorac Cardiovasc Surg* 1999;118:1125-1127.
55. Langley SM, Chai PJ, **Jagers J**, Ungerleider RM. Platelet-activating factor receptor antagonism improves cerebral recovery after circulatory arrest. *Ann of Thorac Surg* 1999; 68:1578-1584.
56. Chai PJ, Williamson A, Lodge AJ, Daggett CW, Scarborough JE, Cheifetz I, Meliones J, **Jagers J**, Ungerleider RM. Effects of ischemia on pulmonary dysfunction after cardiopulmonary bypass. *Ann Thorac Surg* 1999; 67:731-735.
57. Johnston TA, **Jagers J**, McGovern JJ, O'Laughlin MP. Bedside transeptal balloon dilation atrial septostomy for decompression of the left heart during extracorporeal membrane oxygenation. *Catheter Cardiovas Interv*. 1999;46:197-199.
58. Scarborough JE, Daggett CW, Lodge AJ, Chai PJ, Williamson JA, **Jagers J**, George SE, Ungerleider RM. The role of endothelial nitric oxide synthase expression in the development of pulmonary hypertension in chronically hypoxic infant swine. *J Thorac Cardiovasc Surg* 1998;115:343-350.

59. Daggett CW, Lodge AJ, Scarborough JE, Chai PJ, **Jagers J**, Ungerleider RM. Modified ultrafiltration versus conventional ultrafiltration: A randomized prospective study in neonatal piglets. *J Thorac Cardiovasc Surg* 1998;115:336-342.
60. **Jagers J**, Harrison JK, Bashore TM, Davis RD, Glower DD, Ungerleider RM: The Ross procedure: Shorter hospital stay, decreased morbidity, and cost effective. *Ann Thorac Surg* 1998;65:1553-1558.
61. Bengur AR, Li JS, Herlong JR, **Jagers J**, Sanders SP, Ungerleider RM. Intraoperative transesophageal echocardiography in congenital heart disease. *Semin Thorac Cardiovasc Surg* 1998;10:255-264.
62. Darling E, Kaemmer D, Lawson S, Smigla G, Collins K, Shearer I, **Jagers J**. Experimental use of an ultra-low prime neonatal cardiopulmonary bypass circuit utilizing vacuum-assisted venous drainage. *J Extra Corpor Technol* 1998;30:184-189.
63. Fullerton DA, **Jagers J**, Wollmering MM, Piedalu F, Grover FL, McIntyre RC, Variable response to inhaled nitric oxide after cardiac surgery. *Ann Thorac Surg* 1997;63:1251-1256.
64. Fullerton DA, **Jagers J**, Piedalue F, Grover FL, McIntyre RC. Effective control of refractory pulmonary hypertension after cardiac operations. *J Thorac Cardiovasc Surg* 1997;113:363-370.
65. Ungerleider RM, Kanter RJ, O'Laughlin M, Bengur AR, Anderson PA, Herlong JR, Li J, Armstrong BE, Tripp ME, Garson A, Meliones JN, **Jagers J**, Sanders SP, Greeley WJ. Effect of repair strategy on hospital cost for infants with tetralogy of Fallot. *Ann Surg* 1997;225:779-783.
66. Wang A, Pulsipher MW, **Jagers J**, Peterson GE, O'Laughlin MP, Bashore TM, Harrison JK. Simultaneous biplane coronary and pulmonary arteriography: A novel technique for defining the course of an anomalous left main coronary artery originating from the right sinus of Valsalva. *Cathet Cardiovas Diagn* 1997;42:73-78.
67. Ungerleider RM, Bengur AR, Kessenich AL, Liekweg RJ, Hart EM, Rice BA, Miller CE, Lockwood NW, Knauss SA, **Jagers J**, Sanders SP, Greeley WJ. Risk factors for higher cost in congenital heart operations. *Ann Thorac Surg* 1997;64:44-49.
68. Fullerton DA, **Jagers J**, Jones SD, Brown JM, McIntyre RC. Adenosine for refractory pulmonary hypertension. *Ann Thorac Surg* 1996;62:874-887.
69. Vlessis AA, Hovaguimian H, **Jagers J**, Ahmad A, Starr A. Infective endocarditis: Ten year review of medical and surgical therapy. *Ann Thorac Surg* 1996;61:1217-1222.
70. Fullerton DA, Jones SD, **Jagers J**, Piedalue F, Grover FL, McIntyre RC. Effective control of pulmonary vascular resistance with inhaled nitric oxide after cardiac operation. *J Thorac and Cardiovasc Surg* 1996;111:753-762.
71. **Jagers J**, Fullerton DA, Campbell DN, Clarke DR. LVOT pseudoaneurysm: A late complication of extended aortic root replacement. *Ann Thorac Surg* 1996;62:1198-1199.
72. Fullerton DA, Campbell DN, Jones SD, **Jagers J**, Brown JM, Wollmering MM, Grover FL, Mashburn C, Luna M, Sondheimer HM, Boucek M. Heart transplantation in children and young adults: Early and intermediate term results. *Ann Thorac Surg* 1995; 59:804-12.
73. **Jagers J**, Fullerton DA, Campbell DN, Andrea B, Jones SD, Brown JM, Wolfel EE, Lindenfeld J, Grover FL, Bristow MR. Cardiac allograft failure: Successful use of biventricular assist device. *Ann Thorac Surg* 1995;60:1409-1411.

74. **Jagers J**, Wiggins JW, Fullerton DA. Chronic posttraumatic thoracic aortic aneurysm presenting with dysphagia. *J Trauma* 1995;39:391-392.
75. **Jagers J**, Bristo M, Fullerton DA, Grover FL, Campbell DN. Cardiac allograft failure: Successful use of biventricular assist device. *Ann Thorac Surg* 1995;60:1409-1411.
76. **Jagers J**, Chetham P, Kinnard TL, Fullerton D. Intraoperative valve dysfunction: Detection by transesophageal echocardiography. *Ann Thorac Surg* 1995;59:755-757.
77. Jones SD, Fullerton DA, Campbell D, **Jagers J**, Brown JM, Smith R, Grover FL. Technique to stent the open sternum following cardiac surgery. *Ann Thorac Surg* 1994;58:1186-1187.

Book Chapters:

1. Emani SM, Lodge AJ, and **Jagers J**. Surgical Considerations for Congenital Heart Defects. In Caffey's Pediatric Diagnostic Imaging. 11th ed., Thomas L. Slovis, ed., 2007.
2. **Jagers J** and Ungerleider RM. Cardiopulmonary bypass in infants and children. In Critical Heart Disease in Infants and Children. 4th ed, David G. Nichols and Duke D. Cameron, eds. 2005, in press.
3. **Jagers J** and Lodge AJ: Surgical therapy for anomalous aortic origin of the coronary arteries. In Pediatric Cardiac Surgery Annual, Richard A. Jonas, ed. 2005.
4. **Jagers J** and Balsara, K: Mediastinal masses in children, in Seminars in Thoracic and Cardiovascular Surgery; James Cox, ed., 2004.
5. Chai PJ and **Jagers J**: Cardiopulmonary: Coarctation of the aorta, in Surgical Decision Making. 5th edition, by McIntyre, Steigmann, Eiseman, 2003.
6. **Jagers J** and Ungerleider RM: Cardiopulmonary bypass in infants and children, in Pediatric Cardiac Surgery. 3rd edition, edited by Mavroudis and Backer, 2003.
7. Kirshbom PM, **Jagers J**, and Ungerleider RM: Total anomalous pulmonary venous connection, in Pediatric Cardiac Surgery. 3rd edition, edited by Mavroudis and Backer, 2003.
8. Bengur AR, **Jagers J**, and Ungerleider RM: Intraoperative transesophageal echocardiography in congenital heart disease, in Pediatric Cardiac Surgery. 3rd edition, edited by Mavroudis and Backer, 2003.
9. **Jagers J** and Ungerleider RM: Surgery for critical aortic stenosis in fetal and neonatal cardiology. 2nd edition, 2000.
10. **Jagers J** and Ungerleider RM: Cardiopulmonary bypass in infants and children. Seminars in Thoracic and Cardiovascular Surgery: Pediatric Cardiac Surgery Annual 2000. WG Williams, MD, Guest Editor, for American Association for Thoracic Surgery, 2000.
11. **Jagers J** and Ungerleider RM: Cardiopulmonary bypass, in Infant and Neonate Pediatric Cardiac Surgery, 2000.
12. Kirshbom PM, **Jagers J**, Ungerleider RM: Total anomalous pulmonary venous connection, in Pediatric Cardiac Surgery, 3rd edition, 2000.

13. **Jagers J**, Shearer IR, Ungerleider RM: Cardiopulmonary bypass in infants and children, *Cardiopulmonary Bypass Principles and Practice*, 2nd edition, by Gravlee, Davis, Kurusz, Utley, 1999.
14. Fullerton DA, Campbell D, **Jagers J**. Heart Transplantation in Children and Young Adults. *Yearbook of Cardiology*, Engle MA, Mosby Yearbook Inc. Chicago, IL, 1996.
15. **Jagers J** and Feliciano P. Hepatic Trauma, *Advances in Trauma and Critical Care*. Mosby Yearbook Inc. 1993.

Invited Commentaries:

1. Early outcome after Glenn shunt and Fontan palliation and the impact of operating during viral respiratory season: Analysis of a 19-year multi-institutional experience. Nicolas RT, Hills C, Moller JH, Huddleston CB, and Johnson MC. *Ann Thorac Surg*, 2005;79:613-7.
2. Early experience with a modified Norwood procedure using a right ventricle to pulmonary artery conduit. Mahle WT, Cuadrado AR, Tam VKH. *Ann Thorac Surg*. 2003;76:1084-9.

Selected Abstracts:

1. Lawson DS, Smigla G, Kaemmer D, Walczak R, McRobb C, Shearer IR, Lodge AJ, **Jagers J**. A clinical evaluation of the Dideco D100 Kids Neonatal Oxygenator. *Proc Am Acad CV Perf* 2007;28:94.
2. Sheikh AM, Barrett C, Villamizar N, Valente A, Alzate O, Craig D, Lodge A, Lawson J, Milano C, **Jagers J**. Right ventricle hypertrophy and early failure: A proteomics study in a neonatal model. Presented, 13th World Congress on Heart Disease, International Academy of Cardiology Annual Scientific Sessions. Vancouver, BC, Canada. July/2007.
3. Sheikh AM, Barrett C, Villamizar N, Alzate O, Lodge A, Lawson J, **Jagers J**. Proteomics of left ventricular myocardium in a neonatal model of deep hypothermic circulatory arrest (DHCA). Society of Thoracic Surgeons 42nd Annual Meeting, Chicago, Jan/Feb/2006.
4. **Jagers J**, Hanish SI, Craig D, Nassar R, Frank M, Lodge A, Anderson PAW. Kallikrein inhibition with DX88 improves pulmonary function in neonatal cardiopulmonary bypass. Society of Thoracic Surgeons 42nd Annual Meeting, Chicago, Jan/Feb/2006.
5. **Jagers J**, Baig K, Frank M, Nassar R, Anderson PAW. C1 Esterase inhibitor improves cardio-pulmonary function in a model of neonatal cardiopulmonary bypass. The Society of Thoracic Surgeons 42nd Annual Meeting, Chicago, Jan/Feb/2006.
6. Lima B, Hughes GC, Lemaire A, **Jagers J**, Glower DD, Wolfe WG. Short and intermediate-term comparison of aortic root replacement with St Jude® mechanical conduits and aortic allografts. Presented, Southern Thoracic Surgical Association, Orlando, FL, Nov/2005.
7. Walczak R, Lawson DS, Kaemmer D, McRobb C, McDermott P, Smigla G, Shearer I, Lodge A, **Jagers J**. Evaluation of a preprimed microporous hollow-fiber membrane for rapid response neonatal ECMO. Presented, Academy of Cardiovascular Perfusion, Tampa, FL, Jan/2005.
8. Baig K, Anderson PAW, Jiang H, Frank MM, Craig DM, Quick G Jr, Nassar R, **Jagers J**. Neonatal cardiopulmonary bypass: C1 Esterase inhibitor decreases inflammatory insult associated with neonatal cardiopulmonary bypass. Presented, American Heart Association Meeting, Nov/2004.

9. Hanish ST, Emani S, Parsa C, Thompson R, Koch WJ, **Jagers J**. Modulation of the Beta-adrenergic receptor kinase improves cardiac function in a neonatal model of right ventricular hypertrophy. Presented, American Heart Association Meeting, Nov/2004.
10. Williams EA, Ing RJ, Hart JP, **Jagers J**, Pizzo SV. Soluble lipoprotein receptor-related protein is present in endotracheal suctioning after cardiopulmonary bypass in infants and children. *Am J Resp Crit Care Med*, 2003;167(7):A731.
11. Davidson MJ, Jones JM, Emani S, Wilson KH, **Jagers J**, Koch WJ, Milano CA. Cardiac gene delivery with cardiopulmonary bypass. *Circulation*, Jan/2001.
12. Hanish SI, Emani S, Parsa C, Thompson R, Hata J, Williams M, Petrofski J, **Jagers J**, Koch WJ. Pulmonary artery (PA) banding and intracoronary gene delivery is a reproducible means of investigating gene therapy for neonatal right ventricular (RV) failure. *American College of Surgeons*, 2003.
13. Daggett CW, Lodge AJ, Scarborough A, Williamson A, Chai P, **Jagers J**, Ungerleider RM. Myocardial recovery in isolated congenital cyanosis, 1998.
14. Landolfo KP, Glower DD, Cen YY, Davis D, **Jagers J**, Harrison JK, Bashore T. Intermediate-term results from Carpentier-Edwards tricuspid valve repair. *J Am Coll Cardiol*, Feb/1998.
15. Anderson PW, Nassar R, Oakley AE, Shah VC, Lehman KK, Sanders SP, Schwinn DA, **Jagers J**, Ungerleider RM. The neonatal heart and cardiopulmonary bypass (CPB): Myofilament function and proteolysis. *Weinstein Cardiovascular Development Conference*, May/1998.
16. Wang A, Lim CS, Nicely M, **Jagers J**, Ungerleider RM, Harrison JK, Bashore TM, Ryan T. Exercise echocardiography after the pulmonary autograft (Ross) operation for patients with aortic valve disease. *ATC*, May/1998.
17. Chai PJ, Langley SM, **Jagers J**, Ungerleider RM. Hypothermia preserves pulmonary endothelial-dependent function following cardiopulmonary bypass. Presented, American Heart Association, Dallas, TX, Nov/1998.
18. Johnston TA, O'Laughlin MP, **Jagers J**, Ungerleider RM. Intraoperative stenting of the pulmonary arteries. *American Heart Association*, Nov/1997
19. **Jagers J**, Ungerleider RM, Kern FH, Meliones JN, Schulman SR, Wilson BG, Greeley WJ. Effects of modified ultrafiltration (MUF) on immediate post CPB pulmonary and cerebral function: A randomized investigation in infants. *Southeastern Pediatric Cardiology Society*, Sept/1996.

Professional awards and special recognitions:

Meritorious Service Award, 2006 AmSECT Pediatric Conference, American Society of Extracorporeal Technology, Atlanta, Sept 2006
1st Place, C Walton Lillehei Resident Forum Session, AATS 86th Annual Meeting, Philadelphia, PA, April 30, 2006
Professionalism Award, Duke University Medical Students, Duke University Medical Center, April, 2003
Deans Research Fellowship, University of Nebraska Medical Center, 1985
Glenn O. and Evelyn F. Emick Memorial Scholarship, 1981-1983
Golden Eagle Award, Chadron State College, 1981

Participation on National Committees

Pediatric Heart Network Working group on Inflammation and CPB Perioperative outcomes 2009
The Society of Thoracic Surgeons Workforce on Annual Meeting, (Surgical Symposium Co-Chair, 2008-2009)
Pediatric Heart Network Study Steering Committee for SVR2, 2005 - present
Joint PCICS-STS Database Committee, 2005-present
SESATS IX Congenital Heart Surgery Subcommittee, 2004 - present
The Society of Thoracic Surgeons Congenital Heart Surgery Nomenclature and Database Committee, 1999-present
Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, 2007-2008
The Society of Thoracic Surgeons, Program Committee, 2008
The Society of Thoracic Surgeons, Chair, Congenital Symposium, 2008
The Society of Thoracic Surgeons 44th Annual Meeting, Reviewer
Platelet Aggregation Inhibition in Children on Clopidogrel (PICOLO) Steering Committee, 2002-2006
Ad Hoc Committee for Congenital Heart Surgery Initiatives/Outcome Reports Subcommittee, 2000-2002

Local Committees and Affiliations:

Member, Duke Heart Center Operations Committee, Duke Medical Center (2 yr appointment -eff 8/2008)
Member, Pediatric Heart Executive Committee, Duke University Medical Center,
Chair, Children's Marketing Committee, Duke Medical Center (2008-present)
Member, Performance Improvement for Children's Services (2007 - present)
Perioperative Executive Committee, Duke Medical Center (2007 - present)
Chair, Pediatric Patient Satisfaction Committee, Duke Medical Center (2007)

Organizations:

American Academy of Pediatrics, Specialty Fellow
American Association for Thoracic Surgery
American College of Surgeons, Fellow
American Heart Association
Congenital Heart Surgeons Society
International Society for Heart & Lung Transplantation
Society of Thoracic Surgeons
Southern Thoracic Surgical Association
The Society of University Surgeons
North Carolina Medical Society (2004 - present)

Areas of research interests (basic and applied):

Modulation of the inflammatory effects of cardiopulmonary bypass
Basic endothelial cell biology in cardiopulmonary bypass
Outcomes and evidence-based medicine in congenital heart surgery
Molecular mechanisms of neurologic injury associated with CPB: Proteomic and genomic analysis
Molecular pathophysiology of myocardial hypertrophy

Invited Lectures:

1. Presenter: *Surgery for AAOCA: Do we know as much as we think we know.* Baffes Lecture. Children's Memorial Hospital, Chicago, IL, Feb/2009
2. Presenter: *Surgery for peri-membranous and muscular VSD.* 9th Annual International Symposium for Congenital Heart Disease. All Children's Hospital, St. Petersburg, FL, Feb/2009.
3. Co-presenter: *Adult congenital heart disease: Constrasting management strategies for severe pulmonary valve insufficiency.* Duke Heart Center Lecture Series/12th Annual JG Reves, MD Lecture. Duke University Medical Center, Durham, NC, Feb/2009.
4. Moderator: Congenital Parallel Surgical Symposium, The Society of Thoracic Surgeons 45th Annual Meeting, San Francisco, CA, Jan/2009.
5. *Anomalous aortic origin of a coronary aretery: Do we know more now than we knew a few years ago?* The Society of Thoracic Surgeons 45th Annual Meeting, San Francisco, CA, Jan/2009.
6. Video: *Repair of anomalous aortic origin of the right coronary artery.* Pediatric Mechanical Circulatory Support Meeting, Oregon Health Sciences University, Portland, OR, May/2008.
7. *CPB is a procoagulant state.* Pediatric Mechanical Circulatory Support Meeting, Oregon Health Sciences University, Portland, OR, May/2008.
8. *Strategies for improved neurologic outcomes in pediatric cardiac surgery.* Grand Rounds, San Antonio Children's Hospital, San Antonio, TX, Apr/2008.
9. *Surgical considerations for late RVOT in congenital heart disease.* Current Concepts for Right Ventricular Outflow Obstruction, American College of Cardiology, 57th Annual Scientific Session, Chicago, IL, Mar/2008.
10. Congenital Surgical Video: *Surgical repair of AAOCA.* Techniques and Outcomes, American College of Cardiology, 57th Annual Scientific Session, Chicago, IL, Mar/2008.
11. Moderator: *Surgical management of the left ventricular outflow tract.* Congenital Parallel Surgical Symposium, The Society of Thoracic Surgeons 44th Annual Meeting, Fort Lauderdale, FL, Jan/2008.
12. Co-Moderator: *HLHS: Management of the "less than perfect Norwood".* Congenital Parallel Surgical Symposium vs Congenital, The Society of Thoracic Surgeons 44th Annual Meeting, Fort Lauderdale, FL, Jan/2008.
13. Co-Moderator: Congenital Parallel Surgical Symposium vs Congenital, The Society of Thoracic Surgeons 44th Annual Meeting, Fort Lauderdale, FL, Jan/2008.
14. *Surgical options for the failing right ventricle.* American College of Cardiology, New Orleans, LA, Mar/2007.
15. *Repair of anomalous origin of the right coronary artery from the left Sinus of Valsalva: The unroofing technique.* Emani SM, Atkins BZ, Jagers J. The Society of Thoracic Surgeons 43rd Annual Meeting, San Diego, CA, Jan/2007.
16. Video: *Operative and perfusion strategies to minimize CNS injury during surgery for CHD.* The Society of Thoracic Surgeons 43rd Annual Meeting, San Diego, CA, Jan/2007.
17. Poster: *Outcome following unroofing procedure for anomalous aortic orgin of left or right coronary artery.* Emani SM, Fudge JC, Rajagopal K, Herlong R, Daneshmand M, Lodge AJ, Jagers J. The Society of Thoracic Surgeons 43rd Annual Meeting, San Diego, CA, Jan/2007.

18. *Neurologic outcomes of pediatric cardiac surgery and strategies to prevent injury.* Pediatric Grand Rounds, Duke University Medical Center, Durham, NC, Feb/2007.
19. *A failed transplant: Lessons learned.* Third Annual Betsy Lehman Center, Conference for Patient Safety: Promoting Transparency. Boston, MA, Dec/2006.
20. *Perfusion strategies to avoid.* AmSECT/ELSO Pediatric Conference, Atlanta, GA, Sept/2006.
21. *Proteomics of brain injury in a neonatal model of deep hypothermic circulatory arrest.* American Association for Thoracic Surgery 86th Annual Meeting, Philadelphia, PA, Apr/2006.
22. *Management of aortic root disease in Marfan's Syndrome,* Cardiology /Thoracic Surgery Case Management Conference, Duke University Medical Center, Durham, NC, Mar/2006.
23. *C1 Esterase inhibitor improves cardio-pulmonary function in a model of neonatal cardiopulmonary bypass.* The Society of Thoracic Surgeons 42nd Annual Meeting, Chicago, IL, Jan/2006.
24. *Coagulopathy and inflammation in neonatal heart surgery:* World Congress of Pediatric Cardiology, Buenos Aires, Argentina, Sept/2005.
25. *Lessons learned from a failed transplant.* The Cardiac Center at The Children's Hospital of Philadelphia, 8th Annual Update on Pediatric Cardiovascular Disease, Lake Buena Vista, FL, Feb/2005.
26. *The effects of regulatory forces on the ICU environment.* Society of Critical Care Medicine, North Carolina/Virginia Chapter 22nd Annual Scientific Symposium, Keynote address, Williamsburg, VA, June/2004.
27. *Anatomy of an error: Lessons in patient safety.* American Association of Thoracic Surgeons, Postgraduate course; Symposium on Congenital Heart Disease, 84th Annual Meeting, Toronto, Apr/2004.
28. *Repair of anomalous right subclavian artery with reimplantation.* Southern Thoracic Surgical Association, Bonita Springs, FL, Nov/2003.
29. *Congenital coding.* The Society of Thoracic Surgeons Fall Coding Workshop Program, Ft. Lauderdale, FL, Oct/2003.
30. *Stented bioprosthesis for right ventricular outflow tract reconstruction.* American Association of Thoracic Surgeons, 83rd Annual Meeting, Boston, MA, May/2003.
31. *Surgery for DORV.* 3rd Annual Charleston Mini-symposium on Pediatric Cardiology, Charleston, SC, Mar/2003.
32. *Outcome of unroofing procedure for repair of anomalous aortic origin of left or right coronary artery.* Southern Thoracic Surgical Association 49th Annual Scientific Meeting, Miami Beach, FL, Nov/2002.
33. *Update in pediatric cardiothoracic surgery.* Association of Physician Assistants in Cardiovascular Surgery, 3rd Annual Summer Educational Meeting, Hilton Head, SC, July/2002.
34. *Update on congenital cardiac surgery.* Pediatric Grand Rounds, North East Medical Center, Concord, NC, Mar/2002.
35. *Optimal HCT for neonates on CPB.* American Society of Extra-Corporeal Technology, Inc. Pediatric Perfusion Conference. Baltimore, MD, Dec/2001.

36. *Systemic inflammatory response in pediatric heart surgery.* American College of Surgeons Annual Clinical Congress, New Orleans, LA, Oct/2001.
37. *Neurologic injury and neuroprotective strategy for infant heart surgery.* The American Society of Extra-Corporeal Technology Regional Meeting, Charlotte, NC, Oct/2000.
38. *Blood conservation in pediatric cardiac surgery.* The American Society of Extra-Corporeal Technology, Pediatric Perfusion Conference 2000, Houston, TX, Sept/2000.
39. *Inflammatory effects of CPB: An organ system approach.* The American Society of Extra-Corporeal Technology, Pediatric Perfusion Conference 2000, Houston, TX, Sept/2000.
40. *Intraoperative stents to 'rehabilitate' severely stenotic pulmonary vessels.* Society of Thoracic Surgeons Meeting, Fort Lauderdale FL, Feb/2000.
41. *Extra-corporeal membrane oxygenation (ECMO) for post-cardiotomy failure in children: Significance of shunt management in the single ventricle.* Southern Thoracic Surgical Association, Puerto Rico, Nov/1999
42. *Transposition of the great arteries.* The International Nomenclature for Pediatric Cardiac Surgery Subcommittee Meeting, Orlando, FL, Aug/1999.
43. *Current issues in aortic valve surgery.* Duke Medical Center, Department of Medicine Grand Rounds, Durham, NC, Aug/1999.
44. *Congenital heart disease for the new millennium.* Oregon Health Sciences University Surgical Grand Rounds, Portland, OR, Mar/1999.
45. *Infant cardiopulmonary bypass: A procoagulant state.* Society of Thoracic Surgeons, San Antonio, TX, Jan/1999.
46. *Deep hypothermic circulatory arrest creates variable periods of no-reflow that may contribute to cerebral ischemic injury.* 71st Scientific Session of the American Heart Association, Dallas, TX, Nov/1998.
47. *Feasibility of asanguinous CPB prime in neonates using a minicircuit and vacuum assisted venous drainage.* Congenital Heart Surgeon's Society, Chicago, IL, Oct/1998.
48. *Anomalies of pulmonary venous connection.* The First International Nomenclature Conference for Pediatric Cardiac Surgery, Chicago, IL, Sept/1998.
49. *Neonatal CPB: A hypercoagulable state.* Annual Bayer Corporation Meeting, Phoenix, AZ, May/1998.
50. *The Ross procedure: Shorter hospital stay, decreased morbidity, and cost effective.* The Southern Thoracic Surgical Association, Naples, FL, Nov/1997.
51. *The need for prospective randomized trials in the evaluation of occlusion devices in pediatric cardiac surgery.* FDA Advisory Panel, Gaithersburg, MD, Oct/1997.
52. *Surgery for adult congenital heart disease.* Duke University Medical Center, The Duke Heart Center Grand Rounds, Durham, NC, Oct/1997.
53. *The use of corticosteroids to reduce post-CPB inflammatory syndrome in neonates: Impact of dose timing.* Congenital Heart Surgeons Society, Chicago, IL, Sept/1997.

54. *Inflammatory effects of cardiopulmonary bypass in the infant and current surgical therapy of PDA.* A symposium hosted by the Pediatric Cardiovascular Team: The Care of the Patient with Congenital Heart Disease from Diagnosis to Discharge. Duke University Medical Center, Durham, NC, Sept/1997.
55. *Patent ductus arteriosus: Current therapeutic concepts.* The Duke Heart Center Grand Rounds, Durham, NC, Mar/1997.
56. *The effects of modified ultrafiltration on cerebral metabolic recovery and pulmonary airway resistance in neonatal cardiac surgery.* SouthEastern Pediatric Cardiology Society Conference, Atlanta, GA, 1996.
57. *Current therapy of hypoplastic left heart syndrome.* University of Missouri Cardiac Surgery Grand Rounds, Dec/1995.
58. *Coronary artery bypass versus PTCA for multivessel coronary artery disease.* University of Colorado Resident Debates Grand Rounds, Denver, CO, Feb/1995.
59. *Xenotransplantation versus total artificial heart for the treatment of end stage cardiac failure.* University of Colorado Resident Debates Grand Rounds, Denver, CO, 1995.
60. *Cardiac transplantation: The UCHSC Experience.* American College of Surgeons Colorado Chapter, Colorado Springs, CO, Aug/1994.
61. *Angioplasty vs. thrombolytic therapy for acute myocardial infarction.* University of Colorado Resident Debate Grand Rounds, Feb/1994.
62. *Current therapy of esophageal carcinoma.* Legacy Hospitals Medical Surgical Grand Rounds Good Samaritan Hospitals, Portland, OR, 1993.
63. *Popliteal artery entrapment syndrome.* American College of Surgeons Oregon Chapter, Sun River OR, Sept/1992.
64. *An organ system analysis of blunt abdominal injury: CT scan versus exploratory laparotomy.* Northwest Trauma Association Competition, Olympia, WA, 1992.