

**CURRICULUM VITAE**  
**MICHAEL ERIK JESSEN, MD**

**PERSONAL DATA**

Date of Birth: May 26, 1958  
Place of Birth: Melita, Canada  
Citizenship: United States of America  
Family: Spouse: Patti Robyn Jessen (nee Donaldson)  
Children: Robert Michael Jessen (born 8/23/99)  
Nicholas Paul Jessen (born 1/24/02)  
  
Home Address: 5077 Brandywine Lane  
Frisco, Texas 75034  
214-407-6883  
  
Work Address: Department of Cardiovascular and Thoracic Surgery  
University of Texas Southwestern Medical Center at Dallas  
5323 Harry Hines Blvd.  
Dallas TX 75390-8879  
214-645-7721  
  
FAX: 214-645-7701  
E-mail: michael.jessen@utsouthwestern.edu

**PRESENT POSITION**

Professor and Chairman, and  
Frank M. Ryburn, Jr. Distinguished Chair in Cardiothoracic Surgery and Transplantation  
Department of Cardiovascular and Thoracic Surgery  
University of Texas Southwestern Medical Center  
2010 - present

Chief, Cardiothoracic Surgery  
Dallas Veterans Affairs Medical Center  
4500 South Lancaster Blvd  
Dallas, TX 75216  
1992 - present

Faculty Member  
Biomedical Engineering, Division of Applied Science  
University of Texas Southwestern Graduate School of Biomedical Sciences  
1992 - present

Program Director  
Residency Program in Thoracic Surgery  
University of Texas Southwestern Medical Center  
1998 – present

Adjunct Assistant Clinical Professor  
School of Nursing  
University of Texas at Arlington  
2005 - present

## **PRIOR ACADEMIC POSITIONS**

Professor and Vice Chairman, and  
Robert Tucker Hayes Foundation Distinguished Chair in Cardiothoracic Surgery  
Department of Cardiovascular and Thoracic Surgery  
University of Texas Southwestern Medical Center  
2000 - 2010

Associate Professor  
Division of Thoracic and Cardiovascular Surgery  
University of Texas Southwestern Medical Center  
1995 - 2000

Assistant Professor  
Division of Thoracic and Cardiovascular Surgery  
University of Texas Southwestern Medical Center  
1990 - 1995

## **EDUCATION**

1975-1977            University of Manitoba  
Winnipeg, Manitoba, Canada  
Premedical Studies

1977-1981           University of Manitoba  
Winnipeg, Manitoba, Canada  
Doctor of Medicine

## **PROFESSIONAL TRAINING**

1981-1982           University of Manitoba  
Winnipeg, Manitoba, Canada  
Special Mixed Internship in Surgery

1982-1986           University of Manitoba  
Winnipeg, Manitoba, Canada  
Residency in General Surgery

1986-1988 Duke University Medical Center  
Durham, NC  
Surgical Research Fellow

1988-1990 Duke University Medical Center  
Durham, NC  
Residency in Thoracic Surgery

## **CERTIFICATION**

1981 Licentiate of the Medical Council of Canada  
1982 Diplomate of the National Board of Medical Examiners  
1986 Specialist Certificate in General Surgery, Royal College of Surgeons of Canada  
1988 Diplomate of the American Board of Surgery #33953  
(Recertified 1998, 2007)  
1990 Specialist Certificate in Cardiovascular and Thoracic Surgery, Royal College of Surgeons of Canada  
1991 Diplomate of the American Board of Thoracic Surgery #5092  
(Recertified 2000, 2010)

## **HONORS AND AWARDS**

1976 Isbister Scholarship, University of Manitoba  
1976 Alumni Scholarship, University of Manitoba  
1977 Maxwell Rady Scholarship, University of Manitoba  
1977 Morton Stall Scholarship, University of Manitoba  
1981 Valedictorian, Medical School Class of 1981, University of Manitoba  
1984 Harold Micay Surgical Resident Award, University of Manitoba  
1985 Davis and Geck Surgical Resident Award, University of Manitoba  
1994 Lyndon Baines Johnson Research Award, American Heart Association, Texas Affiliate  
2006 Named holder of the Robert Tucker Hayes Foundation Distinguished Chair in Cardiothoracic Surgery  
2010 Named holder of the Frank M. Ryburn Distinguished Chair in Cardiothoracic Surgery  
2011 Department of Cardiovascular and Thoracic Surgery Faculty Teaching Award  
2011 Elected to Alpha Omega Alpha Honor Medical Society

## **LICENSURE**

Texas #H8696  
North Carolina #31841

## RESEARCH SUPPORT

- 1986-87 Surgical Research Fellowship, Department of Surgery, University of Manitoba (Research done at Duke University Medical Center, Durham, NC), \$32,000
- 1987-88 Canadian Heart Foundation Research Fellowship, "Biochemical and functional response to ischemia and reperfusion in the neonatal myocardium", \$33,600 P.I.: M. E. Jessen
- 1987-88 Grant-in-Aid American Heart Association, North Carolina Affiliate #1987-88-A-28 "Vein Graft Harvesting: Endothelial Functional Biochemistry", \$7,500 P.I.: M. E. Jessen
- 1991-93 Texas Advanced Technology Program Research Grant #003660088 "Biocompatibility of Materials for Cardiopulmonary Bypass", \$166,250 P.I.: M.E. Jessen
- 1993-98 Southwestern Biomedical Magnetic Resonance Facility Grant NIH 2 P41 RR02584, P.I. Craig R. Malloy; Collaborative Project #5 "Substrate Modification for Myocardial Protection" Project P.I.: M. E. Jessen
- 1993-95 Texas Advanced Technology Program Development Grant #003660-141 "A Gas Anticoagulant System", \$121,875 P.I.: R.C. Eberhart, Co-I.: M. E. Jessen
- 1994-96 Grant-in-Aid American Heart Association, Texas Affiliate #94G-145 "Metabolic Effects of Cardioplegia Substrate Enhancements" \$82,015 P.I.: M. E. Jessen - *declined*.
- 1994-96 Grant-in-Aid American Heart Association, National Center #94013300 "Improved Substrate Enhancements for Myocardial Protection" \$87,560 P.I.: M. E. Jessen
- 1996-97 Research Grant, BIOPURE Corporation  
"Use of Hemoglobin-Based Oxygen Carriers in Patients Following Cardiac Surgery" \$112,000  
P.I.: P.E. Greilich, Co-I: M. E. Jessen
- 1996-99 Grant-in-Aid American Heart Association, National Center #96007740 "Metabolic Effects of Cardioplegia Substrate Enhancements in Adult and Neonatal Myocardium" \$131,670 P.I.: M. E. Jessen

1997-99 Texas Advanced Technology Program Research Grant  
#003660-047 "Closed Loop Nitric Oxide Delivery System", \$96,030  
P.I.: R. C. Eberhart, Co-I.: M. E. Jessen

1998 Research Grant, Bayer Corporation  
"Anti-inflammatory Effects of Antifibrinolytic Therapy in Cardiac  
Surgery" \$40,000 P.I.: P. E. Greilich, Co-I: M. E. Jessen

1998-99 New Investigator Award, Department of Veterans Affairs, VISN 17  
"Predictive Value of Novel On-Site Hemostasis Monitors on Blood  
Loss" \$88,000.00 P.I.: P. E. Greilich, Co-I.: M. E. Jessen

1998-2002 National Institutes of Health (NHLBI) Grant # 1 R01 HL57310  
"Citric Acid Cycle Metabolism During Cardiac Surgery", \$509,733  
P.I.: M. E. Jessen

1998-2001 Southwestern Biomedical Magnetic Resonance Facility Grant  
NIH 2 P41 RR02584, P.I. Craig R. Malloy;  
Collaborative Project #2 "Metabolic Effects of Cardioplegia  
Substrate Enhancements in Myocardium" Project P.I.: M. E. Jessen

1999 Society of Cardiovascular Anesthesiologists/ Ischemia Research  
and Education Foundation Starter Grant Award  
"Hyperfibrinolysis-Induced Platelet Dysfunction in Patients  
Undergoing Cardiopulmonary Bypass Surgery" \$20,000  
P.I.: P. E. Greilich, Co-I: M. E. Jessen

2001-06 Southwestern NMR Center for *in vivo* Metabolism Facility Grant  
NIH 2 P41 RR02584-14, P.I. Craig R. Malloy;  
Collaborative Project #9 "Citric Acid Cycle Metabolism During  
Cardiac Surgery" Project P.I.: M. E. Jessen

2002-04 Grant-in-Aid American Heart Association, National Center  
#0250316N "Metabolic Mechanisms of Myocardial Protection"  
\$214,500 P.I.: M. E. Jessen

2003-06 Texas Advanced Technology Program Research Grant  
# 010019-0108-2003 " Dynamic Organ Preservation: A Strategy to  
Expand the Donor Pool for Heart Transplantation ", \$160,000  
P.I.: M. E. Jessen

2004-08 Sponsored Research Agreement, Organ Transport Systems  
(Contract ID #700731) "Dynamic Organ Preservation Using  
Preservation Devices", \$570,353 P.I: M. E. Jessen

2009-11 Grant-in-Aid American Heart Association, South Central Affiliate # 09GRNT2300004 "Effects of preservation solution substrate composition on myocardial metabolism during machine perfusion for transplant ", \$140,000 P.I.: M. E. Jessen

## **SOCIETIES**

Fellow, Royal College of Physicians and Surgeons of Canada (ID #342483)  
Fellow, American College of Surgeons (ID #3000542)  
Fellow, American College of Cardiology  
ACCF/AHA Task force on Practice Guidelines - CABG Writing Committee 2010  
Member, Society of Thoracic Surgeons  
Member, Workgroup on Thoracic Resident Issues 2012-2015  
Member, Workgroup on Evidenced Based Surgery 2014-2017  
Member, American Heart Association, Council on Cardiothoracic and Vascular Surgery  
Council Representative to AHA Delegate Assembly 1998, 2000-01  
Member at Large, Executive Committee 2000-01  
Information Technology Working Group 2000-01  
Member, American Medical Association  
Member, Texas Medical Association  
Member, Dallas County Medical Society  
Member, American Society for Artificial Internal Organs  
Program Committee 1994-1996  
Membership Committee 1995-1996  
Member, North Texas Electrophysiology Society  
Board of Trustees 1994-1998  
Program Chairman 1994-1998  
Member, International Society for Magnetic Resonance in Medicine  
Senior Member, Society of University Surgeons  
Active Member, American Association for Thoracic Surgery  
Member, Cardiothoracic Residents Committee 2008-2011  
Co-chair, Cardiothoracic Residents Committee 2011-2012  
Active Member, Cardiac Surgery Biology Club  
Member, Thoracic Surgery Directors Association  
Nominating Committee 2016  
Member, Southern Thoracic Surgical Association

## **Participation in Supported Multicenter Trials**

Trials conducted at the University of Texas Southwestern Medical Center at Dallas, with Michael E. Jessen, MD as co-investigator:

Antiarrhythmics versus Implantable Defibrillators (AVID)

A comparison of antiarrhythmic-drug therapy with implantable defibrillators in patients resuscitated from near-fatal ventricular arrhythmias

Sponsored by the National Institutes of Health

Multicenter UnSustained Tachycardia Trial (MUSTT)

A comparison of antiarrhythmic-drug therapy with implantable defibrillators in patients with inducible ventricular tachyarrhythmias

Sponsored by the National Institutes of Health

P2 Endotak Investigators Study

Phase I clinical investigation of a non-thoracotomy defibrillator lead in combination with a biphasic ICD generator system

Sponsored by Cardiac Pacemakers, Inc.

Pexelizumab for the Reduction of Infarction and Mortality in Coronary Artery Bypass Graft Surgery (PRIMO-CABG)

Clinical trial evaluating the effects of Pexelizumab in patients undergoing cardiac surgery with cardiopulmonary bypass.

Sponsored by Alexion Pharmaceuticals

Program in Ex-vivo Vein graft Engineering via Transfection (PREVENT-IV)

Phase III Clinical trial evaluating the effects of a transcription factor blocking agent (E2F decoy) on vein graft patency and intimal hyperplasia after coronary bypass grafting.

Sponsored by Corgentech, Inc.

Surgical Treatment of Ischemic Congestive Heart Failure (STICH)

Clinical trial evaluating the role of coronary bypass grafting and ventricular restoration surgery in patients with congestive heart failure from ischemic heart disease.

Sponsored by the National Institutes of Health

Natreacor Administered Peri-Anesthesia in Patients Undergoing CT Surgery (NAPA)

Scios Study A014. A pilot multicenter, randomized, double-blind, placebo-controlled study to evaluate Nesiritide infusion, initiated post-induction of anesthesia, in management of coronary artery bypass graft (CABG) patients requiring cardiopulmonary bypass (CPB)

Sponsored by Scios Inc.

MC-1 to Eliminate Necrosis and Damage in CABG Surgery (MEND-CABG II)

A randomized, double-blind, placebo-controlled, multi-center study to evaluate the cardioprotective effects of MC-1 in patients undergoing high-risk coronary artery bypass graft (CABG) surgery

Sponsored by Medisure, Inc

Reduction in Cardiovascular Events by Acadesine in subjects undergoing CABG Trial (RED-CABG).

A randomized, double-blind, placebo-controlled, multinational, Phase 3 study of high-risk patients undergoing on-pump CABG to assess the effect of acadesine as an intravenous infusion for the prevention of ischemia-reperfusion injury

Sponsored by Schering-Plough Corporation

Omega-3 Fatty Acids for Prevention of Post-Operative Atrial Fibrillation (OPERA).

A randomized, multicenter, double-blind, placebo-controlled, multinational study of patients undergoing cardiac surgery to assess the effect of n-3 polyunsaturated fatty acids (PUFA) for the prevention of atrial fibrillation after surgery.

Sponsored by UNICORN/ GlaxoSmithKline

A Study of RO4905417 in Patients Undergoing Coronary Artery Bypass Graft (CABG) Surgery (SELECT CABG).

A randomized double-blind, placebo-controlled study to evaluate the efficacy and safety of RO4905417 in the prevention of saphenous vein graft disease in patients undergoing elective or urgent coronary artery bypass surgery.

Sponsored by Hoffmann-La Roche

Novel Lung Trial: Normothermic Ex Vivo Lung Perfusion (EVLP) As an Assessment Of Extended/Marginal Donor Lungs (NCT01365429)

A non-randomized safety study evaluating ex-vivo perfusion of human donor lungs with a specialized solution (Steen Solution) to assess the ability to transplant lungs otherwise deemed unsuitable for transplantation or lungs procured for donation after cardiac death (DCD) donors.

Sponsored by XVIVO Perfusion

Trials conducted at the Dallas Veterans Affairs Medical Center, with Michael E. Jessen, MD as site investigator:

Coronary Artery Revascularization Prophylaxis Trial (CARP)

A clinical trial of revascularization prior to peripheral vascular surgery

Sponsored by the VA Cooperative Study Program (Study #411)

Outcomes Following Myocardial Revascularization: On and Off Cardiopulmonary Bypass (ROOBY)

A clinical trial of on-pump and off-pump coronary bypass surgery

Sponsored by the VA Cooperative Study Program (Study #517)

VA Coronary Artery Revascularization in Diabetes Study (VA CARDS)

A randomized multi-site trial comparing percutaneous coronary stenting to coronary bypass for angiographically significant coronary artery disease in diabetics

Sponsored by the VA Cooperative Study Program (Study #557)



Evaluation of XIENCE PRIME™ or XIENCE V® versus Coronary Artery Bypass Surgery for Effectiveness of Left Main Revascularization (EXCEL)  
A global, prospective, multi-center, randomized trial to assess the safety and efficacy of the XIENCE PRIME/XIENCE V Everolimus Eluting Coronary Stent Systems, compared to coronary artery bypass grafting (CABG), in select patients with unprotected left main coronary artery disease.

Sponsored by Abbott

C-Pulse® System: A Heart Assist Device Clinical Study (COUNTER HF)  
A prospective, multi-center, randomized trial to assess the safety and efficacy of the C-Pulse® System ("C-Pulse") as a treatment for patients in moderate to severe heart failure. ClinicalTrials.gov Identifier: NCT01740596

Sponsored by Sunshine Heart Inc.

### **Peer Review Activities**

Editorial Board, Annals of Thoracic Surgery, 2006-present

Ad hoc reviewer:

Journal of Thoracic and Cardiovascular Surgery

Journal of Cardiac Surgery

ASAIO Journal

Circulation

Journal of Applied Physiology

Surgery

PLoS One

Member, SESATS VII, Critical Care Committee, 1996-7

Member, Western Review Consortium, American Heart Association, 2004

Abstract Reviewer, Scientific Sessions of the American Heart Association, 2004-6, 2009-15

Abstract Reviewer, Annual Meeting of the Society of Thoracic Surgeons, 2005-9, 2014-15

Abstract Reviewer, Annual Meeting of the American Association for Thoracic Surgery, 2010

Chairman, Data Safety Monitoring Committee, Veterans Affairs CSP# 588 "Randomized Endo-Vein Graft Prospective (REGROUP) Trial

## BOOKS

Meyer DM, Jessen ME: Extracorporeal Life Support. Georgetown, Landes Bioscience, 2001.

## BOOK CHAPTERS

1. Abd-Elfattah AS, Maddox RP, Jessen ME, Rebeyka IM, Wechsler AS: Selective nucleoside transport blocker NBMPR attenuates myocardial stunning in a rabbit model deficient of xanthine oxidase. *In* Abd-Elfattah AS, Wechsler AS (Eds.): *Purines and Myocardial Protection*. Kluwer Academic Publishers, Norwell, MA, 1995, pp. 219-230.
2. Jessen ME: Surgical Disorders of the Pericardium. *In* Sabiston DC (Ed.): *Textbook of Surgery: The Biological Basis of Modern Surgical Practice*, 15th ed. Philadelphia, W.B. Saunders Company, 1996 pp. 1943-1951.
3. Jessen ME: Surgical Disorders of the Pericardium. *In* Sabiston DC, Lyerly HK (Eds.): *Textbook of Surgery Pocket Companion*. Philadelphia, W.B. Saunders Company, 1997 pp. 698-700.
4. Eberhart RC, Li J, Sly MK, Shastri P, Bhujle R, Gaffke JN, Clift JE, Ye Y-W, Jessen ME, Chao R, Constantinescu A, Kulkarni P: Scintigraphic Analysis of Cell Adhesion in Oxygenators and Internal Organs. *In* Akutsu T, Koyanagi H (Eds.): *Heart Replacement - Artificial Heart 6*. Tokyo, Springer-Verlag, 1998 pp. 464-466.
5. Meyer DM, Wait MA, Jessen ME, Ring WS: Optimal Thoracic Organ Donor Management. *In* Klintmalm GB, Levy MF (Eds.): *Handbook of Organ Retrieval and Preservation*. Austin, Landes Bioscience, 1999 pp. 94-112.
6. Wait MA, Meyer DM, Jessen ME, Ring WS: Surgical Technique for Thoracic Organ Recovery. *In* Klintmalm GB, Levy MF (Eds.): *Handbook of Organ Retrieval and Preservation*. Austin, Landes Bioscience, 1999 pp. 128-146.
7. Eberhart RC, Li J, Dollar ML, Kulkarni PV, Constantinescu A, Chao RY, Jessen ME: Surface modification and analysis of membrane oxygenators. *In* Park KD, Kwon IC, Yui N, Park K (Eds.): *Biomaterials and Drug Delivery Systems: Towards the New Millennium*. Seoul, Hanrimwon Press, 2000 pp. 437-48.
8. Sandoval BA, Jessen ME: Pericardial Disease. *In* Pappas TN, Purcell GP (Eds.): *Unbound Surgery*. Charlottesville, Unbound Medicine, Inc., 2004.  
<http://www.unboundmedicine.com/unboundsurgery.htm>
9. Eberhart RC, Li J, Sly MK, Chao R, Constantinescu A, Kulkarni PV, Jessen ME: Noninvasive measurement of the transient adhesion of cells to blood-contacting surfaces. *In* Yaszemski M, Trantolo D, Lewandrowski KU, Hasirci V, Altobelli D, Wise D

(Eds.): *Tissue Engineering and Novel Delivery Systems*. New York, Marcel Dekker, 2004 pp. 55-74.

## **PUBLISHED ARTICLES**

1. Downs AR, Jessen ME, Lye CR: Peripheral nerve injuries following carotid endarterectomy. Can J Surg, 30:22-24, 1987.
2. Brunsting LA, Jessen ME, Abd-Elfattah AS, Mask WK, Godwin CK, Wechsler AS: Myocardial protective effects of the class Ic antiarrhythmic agent flecainide. J Thorac Cardiovasc Surg, 94:904-910, 1987.
3. Jessen ME, Abd-Elfattah AS, Lekven J, Brunsting LA, Doherty NE, Wechsler AS: Sensitivity of neonatal hearts to ischemia: Confusion from failure to control the bathing medium during ischemia. Surg Forum, 38:226-227, 1987.
4. Abd-Elfattah AS, Jessen ME, Lekven J, Doherty NE, Brunsting LA, Wechsler AS: Myocardial reperfusion injury: Role of myocardial hypoxanthine and xanthine in "free-radical-mediated" reperfusion injury. Circulation, 78(suppl III):224-235, 1988.
5. Jessen ME, Hanan SA, Abd-Elfattah AS, Tuchy GE, Maddox RP, Wechsler AS: Oxygen consumption in the empty-beating, fibrillating, and potassium-chloride arrested neonatal heart. Surg Forum, 39:233-235, 1988.
6. Tuchy GE, Jessen ME, Hanan SA, Abd-Elfattah AS, Maddox RP, Wechsler AS: Coronary sinus delivery of cardioplegia containing metabolic inhibitors for protection of ischemic myocardium. Surg Forum, 39:204-297, 1988.
7. Lekven J, Brunsting LA, Jessen ME, Abd-Elfattah AS, Doherty NE, Wechsler AS: Myocardial oxygen consumption with epinephrine in ischemically-injured canine hearts. Circulation, 78(suppl III):125-136, 1988.
8. Brunsting LA, Jessen ME, Lekven J, Hoehner JC, Dyke CM, Wechsler AS: Importance of perfusion pressure in the preload-dependence of right ventricular blood flow. Surg Forum, 39:244-246, 1988.
9. Hanan SA, Jessen ME, Tuchy GE, Abd-Elfattah AS, Wechsler AS: Effect of coronary collateral recruitment on ventricular recovery after brief coronary occlusion in dogs and swine. Surg Forum, 40:227-229, 1989.
10. Mask WK, Abd-Elfattah AS, Jessen ME, Brunsting LA, Lekven J, Wechsler AS: Embryonic versus adult myocardium: Adenine nucleotide degradation during ischemia. Ann Thorac Surg, 48:109-112, 1989.

11. Abd-Elfattah AS, Jessen ME, Hanan SA, Tuchy G, Wechsler AS: Is adenosine 5'-triphosphate derangement or free-radical-mediated injury the major cause of ventricular dysfunction during reperfusion? Circulation 82(suppl IV):341-350, 1990.
12. Eichhorn EJ, Alvarez LG, Jessen ME, Fass SM, Chao RY, Haagen D, Grayburn PA: Measurement of coronary and peripheral artery flow by intravascular ultrasound and pulsed doppler velocimetry: *In vivo* feasibility studies. Am J Cardiol 70:542-545, 1992.
13. Bassel-Duby R, Grohe CM, Jessen ME, Parsons WJ, Richardson JA, Chao R, Grayson J, Ring WS, Williams RS: Sequence elements required for transcriptional activity of the human myoglobin promoter in intact rat myocardium. Circ Res 73:360-366, 1993.
14. Jessen ME, Kovarik TE, Jeffrey FM, Sherry AD, Storey CJ, Chao RY, Ring WS, Malloy CR: Effects of amino acids on substrate selection, anaplerosis and left ventricular function in the ischemic reperfused rat heart. J Clin Invest 92:831-839, 1993.
15. Jessen ME, Meyer DM, Moncrief CM, Wait MA, Melamed NB, Ring WS: Reducing neurologic complications after cardiac transplantation: Technical considerations. J Card Surg 8:546-553, 1993.
16. Moliterno DJ, Jessen ME, Schueler K, Cohen J: Plasma Lipoprotein(a) concentrations are not elevated by cardiopulmonary bypass. Atherosclerosis 104:223-225, 1993.
17. Wait MA, Jessen ME: Rupture of the pulmonary artery with free intrapleural hemorrhage from Swan-Ganz catheters. Contemp Surg 44:275-280, 1994.
18. Jessen ME, Olivari MT, Wait MA, Meyer DM, Yancy CW, Jr, Ring WS: Frequency and significance of right bundle branch block after cardiac transplantation. Am J Cardiol 73:1009-1011, 1994.
19. Willard JE, Landau C, Glamann DB, Burns D, Jessen ME, Pirwitz MJ, Gerard RD, Meidell RS: Genetic modification of the vessel wall: comparison of surgical and catheter-based techniques for delivery of recombinant adenovirus. Circulation 89:2190-2197, 1994.
20. Wait MA, Mueller M, Barth MJ, Brickner E, Salman T, Jessen ME: Traumatic coronary sinucameral fistula due to penetrating cardiac injury. Report of a case and review of the literature. J Trauma 36:894-897, 1994.
21. Abd-Elfattah AS, Jessen ME, Wechsler AS: Nucleoside trapping during reperfusion prevents ventricular dysfunction, "stunning", in absence of adenosine. J Thorac Cardiovasc Surg 108:269-78, 1994.

22. Reed MK, Barak C, Malloy CR, Maniscalco SP, Jessen ME: Effects of cardioplegia with glutamate and aspartate on TCA cycle metabolism. Surg Forum 45:227-30, 1994.
23. Olivari M-T, Jessen ME, Baldwin BJ, Horn VPH, Yancy CW Jr, Ring WS, Rosenblatt RL: Triple-drug immunosuppression with steroid discontinuation by six months after cardiac transplantation. J Heart Lung Transplant 14:127-35, 1995.
24. Meyer DM, Jessen ME, and the Extracorporeal Life Support Organization: Results of extracorporeal membrane oxygenation (ECMO) in neonates with sepsis - the ELSO experience. J Thorac Cardiovasc Surg 109:419-27, 1995.
25. Meyer DM, Jessen ME, Eberhart RC, and the Extracorporeal Life Support Organization: Neonatal extracorporeal membrane oxygenation complicated by sepsis. Ann Thorac Surg 59:975-80, 1995.
26. Vardi A, Jessen ME, Chao RY, Brink LW, Levin DL, Johnson RL: Effect of ECMO flow on pulmonary capillary blood flow. Crit Care Med 23:726-32, 1995.
27. Horton RP, Canby RC, Roman CA, Jessen ME, Schulte TJ, Page RL: Diagnosis of ICD lead failure using continuous event marker recording. PACE 18:1331-4, 1995.
28. Mull DH, Wait MA, Page RL, Jessen ME: The importance of complete system removal of infected cardioverter-defibrillators. Ann Thorac Surg 60:704-6, 1995.
29. Sly MK, Prager MD, Eberhart RC, Jessen ME, Kulkarni PV: Inhibition of surface-induced platelet aggregation by nitric oxide. ASAIO J 41:M394-M398, 1995.
30. Meyer DM, Jessen ME, Grayburn PA: The use of echocardiography to detect cardiac injury after penetrating thoracic trauma: A prospective study. J Trauma 39:902-9, 1995.
31. Jessen ME, Abd-Elfattah AS, Wechsler AS: Neonatal myocardial oxygen consumption during ventricular fibrillation, hypothermia, and potassium chloride arrest. Ann Thorac Surg 61:82-7, 1996.
32. Kessler DJ, Canby RC, Horton RP, Joglar JA, Jessen ME, Page RL: Effect of biphasic endocardial countershock on pacing thresholds in humans. Am J Cardiol 77:527-8, 1996.
33. Malloy CR, Jones JG, Jeffrey FM, Jessen ME, Sherry AD: Contribution of various substrates to total citric acid cycle flux and anaplerosis as determined by <sup>13</sup>C isotopomer analysis and O<sub>2</sub> consumption in the heart. Magnetic Resonance Materials in Physics, Biology and Medicine 4:35-46, 1996.

34. Jessen ME, Horn VPH, Weaver DE, Boehrer JD, Ring WS: Successful surgical repair of aortic dissection presenting with complete heart block. Ann Thorac Surg 62:1202-3, 1996.
35. Sly M, Prager M, Li J, Harris F, Shastri P, Bhujle R, Chao R, Kulkarni P, Constantinescu A, Jessen M, Eberhart R: Platelet and neutrophil distributions in pump-oxygenator circuits. III. Influence of nitric oxide gas infusion. ASAIO J 42:M494-M499, 1996.
36. Reed MK, Barak C, Malloy CR, Maniscalco SP, Jessen ME: Effects of glutamate and aspartate on substrate oxidation during potassium arrest. J Thorac Cardiovasc Surg 112:1651-60, 1996.
37. Johnston N, Jessen ME, Zeidler ME: Simplified solution to reducing electrical noise during cardiac surgery. J Extra Corpor Technol 28:205-8, 1996.
38. Horton RP, Canby RC, Roman CA, Hull ML, Kaye SA, Jessen ME, Page RL: Determinants of non-thoracotomy biphasic defibrillation. PACE 20:60-4, 1997.
39. Meyer DM, Jessen ME and the Extracorporeal Life Support Organization: Results of extracorporeal membrane oxygenation (ECMO) in children with sepsis. Ann Thorac Surg 63:756-61, 1997.
40. Mull DH, Jessen ME: Alternate surgical approach for post-traumatic thoracic aortic pseudoaneurysm. J Trauma 42:546-8, 1997.
41. Horton RP, Canby RC, Kessler DJ, Joglar JA, Hume A, Jessen ME, Scott WP, Page RL: Ablation of ventricular tachycardia associated with Tetralogy of Fallot: Demonstration of bi-directional block. J Cardiovasc Electrophysiol 8:432-5, 1997.
42. Tauriainen MP, Jessen ME, Malloy CR, Chao RY, Reed MK, Meyer DM: Effect of 6-hour preservation on substrate utilization in an isolated lung preparation: A <sup>13</sup>C magnetic resonance spectroscopy study. Surg Forum 48:322-4, 1997.
43. Rajasubramanian S, Nelson KD, Shastri P, Constantinescu A, Kulkarni P, Jessen ME, Eberhart RC: Design of an oxygenator with enhanced gas transfer efficiency. ASAIO J 43:710-4, 1997.
44. Bhujle R, Li J, Shastri P, Gaffke J, Clift J, Ye Y-W, Dollar ML, Ching P, Chao R, Constantinescu A, Kulkarni P, Wians F, Jessen M, Eberhart R: Influence of cardiopulmonary bypass on platelet and neutrophil accumulations in internal organs. ASAIO J 43:739-44, 1997.
45. Meyer DM, Jessen ME, Wait MA, Estrera AS: Early evacuation of traumatic hemothoraces using thoracoscopy - a prospective, randomized trial. Ann Thorac Surg 64:1396-1401, 1997.

46. The AVID Investigators: A comparison of antiarrhythmic-drug therapy with implantable defibrillators in patients resuscitated from near-fatal ventricular arrhythmias. N Engl J Med 337:1576-83, 1997.
47. Barak C, Reed MK, Maniscalco SP, Sherry AD, Malloy CR, Jessen ME: Effects of dichloroacetate on mechanical recovery and oxidation of physiological substrates after ischemia and reperfusion in the isolated heart. J Cardiovasc Pharmacol 31:336-44, 1998.
48. Abd-Elfattah ASA, Maddox RP, Jessen ME, Rebeyka IM, Wechsler AS: Role of nucleoside transport and purine release in a rabbit model of myocardial stunning. Mol Cell Biochem 180:145-51, 1998.
49. Abd-Elfattah AS, Jessen ME, Lekven J, Wechsler AS: Differential cardioprotection with selective inhibitors of adenosine metabolism and transport: Role of purine release in ischemic and reperfusion injury. Mol Cell Biochem 180:179-91, 1998.
50. Li J, Sly MK, Chao R, Constantinescu A, Kulkarni PV, Wians FH Jr, Jessen ME, Eberhart RC: Transient adhesion of platelets in pump-oxygenator systems: influence of SMA and nitric oxide treatments. J Biomater Sci Polymer Edn 10:235-46, 1999.
51. Joglar JA, Kessler DJ, Welch PJ, Keffer JH, Jessen ME, Hamdan MH, Page RL: Effects of repeated electrical defibrillations on cardiac troponin I levels. Am J Cardiol 83:270-2, 1999.
52. Johnston N, Jessen ME, DiMaio JM, Douglass DS: The emergency use of recombinant hirudin in cardiopulmonary bypass. J Extra Corpor Technol 31:211-5, 1999. Reprinted as a "Classic Article" in J Extra Corp Technol 37: 319-323, 2005.
53. Latham P, Revelis AF, Joshi GP, DiMaio JM, Jessen ME: Use of recombinant hirudin in patients with heparin-induced thrombocytopenia with thrombosis requiring cardiopulmonary bypass. Anesthesiology 92:263-6, 2000.
54. DiCorte CJ, Latham P, Greilich PE, Cooley MT, Grayburn PA, Jessen ME: Esophageal doppler monitor determinations of cardiac output and preload during cardiac operations. Ann Thorac Surg 69:1782-6, 2000.
55. Meyer PE, Jessen ME, Patel JB, Chao RY, Malloy CR, Meyer DM: Effects of storage and reperfusion oxygen content on substrate metabolism in the isolated rat lung. Ann Thorac Surg 70:264-9, 2000.
56. Meyer DM, Rogers TE, Jessen ME, Estrera AS, Chin AK: Histologic evidence of the safety of endoscopic saphenous vein graft preparation. Ann Thorac Surg 70:487-91, 2000.

57. Willett DW, Hall SA, Jessen ME, Wait MA, Grayburn PA: Assessment of aortic regurgitation by transesophageal color Doppler imaging of the vena contracta: Validation against an intraoperative aortic flow probe. J Am Coll Cardiol 37:1450-5, 2001.
58. Freeman RK, Al-Dossari G, Hutcheson KA, Huber L, Jessen ME, Meyer DM, Wait MA, DiMaio JM: Indications for utilizing video assisted thoracoscopic surgery to diagnose diaphragm injuries following penetrating chest trauma. Ann Thorac Surg 72:342-7, 2001.
59. Greilich PE, Okada K, Latham P, Kumar RR, Jessen ME: Aprotinin but not  $\epsilon$ -aminocaproic acid decreases interleukin-10 after cardiac surgery with extracorporeal circulation: Randomized, double-blind, placebo-controlled study in patients receiving aprotinin and  $\epsilon$ -aminocaproic acid. Circulation 104[suppl I]:I-265-9, 2001.
60. Hamilton TT, Jessen ME, Chao RY, Adams LD, Meyer DM: Effects of perfusion conditions on oxidative metabolism: A caveat for studies using isolated perfused lungs. Surg Forum 52:129-31, 2001.
61. Wheeler W, Hayes S, Nguyen N, Cilla AM, Rybowicz J, Jones CC, Ramsay MAE, Hall SA, Meyer D, Capehart J, Jessen ME, Ring S: Sildenafil – a possible treatment for acute pulmonary hypertension during cardiac surgery. BUMC Proceedings 15:13-15, 2002.
62. Greilich PE, Brouse CF, Beckham J, Jessen ME, Martin EJ, Carr ME: Reductions in platelet contractile force correlate with duration of cardiopulmonary bypass and blood loss in patients undergoing cardiac surgery. Thrombosis Research 105:523-9, 2002.
63. Hamilton TT, Huber LM, Jessen ME: PulseCO: A less-invasive method to monitor cardiac output from arterial pressure after cardiac surgery. Ann Thorac Surg 74:S1408-12, 2002.
64. Gilbert NF, Meyer PE, Tauriainen MP, Chao RY, Patel JB, Malloy CR, Jessen ME: Effects of hypothermia on myocardial substrate selection. Ann Thorac Surg 74:1208-12, 2002.
65. Quin JA, Tauriainen MP, Huber LM, McIntire DD, Kaiser PA, Ring WS, Jessen ME: Predictors of pericardial effusion after orthotopic heart transplantation. J Thorac Cardiovasc Surg 124:979-83, 2002.
66. Greilich PE, Brouse CF, Whitten CW, Chi L, DiMaio JM, Jessen ME: Antifibrinolytic Therapy During Cardiopulmonary Bypass Reduces Proinflammatory Cytokine Levels: A Randomized, Double-Blind, Placebo-Controlled Study of  $\epsilon$ -Aminocaproic Acid and Aprotinin. J Thorac Cardiovasc Surg 126:1498-1503, 2003.



67. Greilich PE, Brouse CF, Rinder CS, Smith BR, Sandoval BA, Rinder HM, Eberhart RC, Jessen ME: Effects of  $\epsilon$ -aminocaproic Acid and aprotinin on leukocyte-platelet adhesion in patients undergoing cardiac surgery. Anesthesiology 100:225-33, 2004.
68. Peltz M, He T-T, Adams GA, Chao RY, Jessen ME: Myocardial oxygen demand and redox state affect fatty acid oxidation in the potassium arrested heart. Surgery 136:150-9, 2004.
69. Meyer DM, Edwards LB, Torres F, Jessen ME, Novick RJ: Impact of recipient age and procedure type on survival following lung transplantation for interstitial pulmonary fibrosis. Ann Thorac Surg 79:950-0, 2005.
70. Peltz M, He T-T, Adams GA, Chao RY, Jessen ME, Meyer DM: Pyruvate-modified Perfadex® Improves Lung Function after Long-term Hypothermic Storage. J Heart Lung Transplant 24:896-903, 2005.
71. Peltz M, Sandoval BA, Jessen ME: Traumatic aortic rupture of a descending thoracic aortic homograft. Ann Thorac Surg 80:710-712, 2005.
72. Bhojani RA, Rosenbaum DH, Dikmen E, Paul MC, Atkins BZ, Zonies D, Estrera AS, Wait MA, Meyer DM, Jessen ME, DiMaio JM: Contemporary assessment of laryngotracheal trauma. J Thorac Cardiovasc Surg 130:426-32, 2005.
73. Peltz M, Hamilton TT, He T-T, Adams GA, Koshy S, Burgess SC, Chao RY, Jessen ME, Meyer DM: Lung preservation solution substrate composition affects rat lung oxidative metabolism during hypothermic storage. Resp Physiol Neurobiol 148:275-283, 2005.
74. Wheatley GH, Rosenbaum DH, Paul M, Dine AP, Wait MA, Meyer DM, Jessen ME, Ring WS, DiMaio JM: Improved pain management outcomes using a continuous infusion of a local anesthetic following thoracotomy. J Thorac Cardiovasc Surg 130:464-8, 2005.
75. Wheatley GH, Wait MA, Jessen ME: Infective endocarditis associated with a scorpion sting: Report of two cases. Ann Thorac Surg 80:1489-90, 2005.
76. Peltz M, He T-T, Adams GA, Chao RY, Meyer DM, Jessen ME: Characterizing lung metabolism with  $^{13}\text{C}$  MRS in a small animal model: Evidence of gluconeogenesis during hypothermic storage. Transplantation 80:417-20, 2005.
77. Peltz M, He T-T, Adams GA, Koshy S, Burgess SC, Chao RY, Meyer DM, Jessen ME: Perfusion preservation maintains myocardial ATP levels and reduces apoptosis in an *ex-vivo* rat heart transplantation model. Surgery 138:795-805, 2005.
78. Rosenbaum DH, Bhojani RA, Dikmen E, Kaiser PA, Paul MC, Wait MA, Meyer DM, Jessen ME, Yancy CW, Rosenblatt RL, Torres F, Perkins S, Ring WS, DiMaio JM:

Routine computed tomography screening of the chest in high-risk cardiac transplant recipients may improve survival. J Heart Lung Transplant 24:2043-7, 2005.

79. Rosenbaum DH, Adams BC, Mitchell JD, Jessen ME, Paul MC, Kaiser PA, Pappas PA, Meyer DM, Wait MA, Drazner MH, Yancy CW Jr, Ring WS, DiMaio JM: Effects of early steroid withdrawal after heart transplantation. Ann Thorac Surg 82:637-44, 2006.

80. Peltz M, Douglass D, Meyer DM, Wait MA, DiMaio JM, Ring WS, Jessen ME: Hypothermic circulatory arrest for repair of injuries of the thoracic aorta and great vessels. Interact Cardiovasc Thorac Surg 5:560-5, 2006.

81. Bell C, Yorganson J, Jessen ME, Josephs S, Jain T, Jeyarajah DR: Management of hepatic and intracardiac echinococcal cysts: Case report and review of the literature. Surg Infect (Larchmt) 7:309-13, 2006.

82. Rosenbaum DH, Peltz M, Merritt ME, Thatcher JE, Sasaki H, Jessen ME: Benefits of perfusion preservation in canine hearts stored for short intervals. J Surg Res 140:243-9, 2007.

83. Rosenbaum DH, Peltz M, DiMaio JM, Meyer DM, Wait MA, Merritt ME, Brown R, Chao RY, Ring WS, Jessen ME: Perfusion preservation vs. static preservation for cardiac transplantation: Effects on myocardial function and metabolism. J Heart Lung Transplant 27:93-9, 2008.

84. MEND-CABG II Investigators: Efficacy and safety of pyridoxal 5'-phosphate (MC-1) in high-risk patients undergoing coronary artery bypass graft surgery. The MEND-CABG II Randomized clinical trial. JAMA 299:1777-87, 2008.

85. Greilich PE, Brouse CF, Rinder HM, Jessen ME, Rinder CS, Eberhart RC, Whitten CW, Smith BR: Monocyte activation in on-pump versus off-pump coronary artery bypass surgery. J Cardiothorac Vasc Anesth 22:361-368, 2008.

86. Peltz M, Cobert ML, Rosenbaum DH, West L, Jessen ME: Myocardial perfusion characteristics during machine perfusion for heart transplantation. Surgery 144:225-32, 2008.

87. Daye J, Boatman D, Peters C, Varghese I, Haider A, Roesle M, Jessen ME; DiMaio JM, Banerjee S, Brilakis ES: Perioperative risk of patients undergoing noncardiac surgery after coronary artery bypass surgery. J Invest Med 56:878-81, 2008.

88. Cobert ML, West LM, Jessen ME: Machine perfusion for cardiac allograft preservation. Curr Opin Organ Transplant 13:526-30, 2008.

89. Murphy EH, Beck AW, Clagett GP, DiMaio JM, Jessen ME, Arko FR: Combined aortic debranching and thoracic endovascular aneurysm repair (TEVAR) effective but at a cost. Arch Surg 144:222-7, 2009.

90. Greilich PE, Jessen ME, Satyanarayana N, Whitten CW, Nuttall GA, Beckham JM, Wall MH, Butterworth JF: Effect of epsilon-aminocaproic acid and aprotinin on fibrinolysis and blood loss in patients undergoing primary, isolated CABG surgery: A placebo-controlled, non-inferiority trial. Anesth Analg 109:15-24,2009.
91. Murphy EH, DiMaio JM, Dean W, Jessen ME, Arko FR: Endovascular repair of acute traumatic thoracic aortic transection with laser assisted in-situ fenestration of the left subclavian artery. J Endovasc Ther 16:457-63, 2009.
92. Sasaki H, Mitchell J, DiMaio JM, Jessen ME, Lavingia B, Comeaux A, Meyer DM: Bridge to heart transplantation for status 1 patients with left ventricular assist device versus inotropic agents. J Card Surg 24:756-62, 2009.
93. Sebastian VA, Carroll B, Jessen ME: Pyoderma gangrenosum associated with chronic idiopathic myelofibrosis after coronary artery bypass graft surgery. Interact Cardiovasc Thorac Surg 10:135-7, 2010.
94. Cobert ML, Peltz M, West LM, Jessen ME: Importance of the organ preservation solution composition in reducing myocardial edema during machine perfusion for heart transplantation. Transplant Proc 42:1591–1594, 2010.
95. Parikh SV, de Lemos JA, Jessen ME, Brilakis ES, Ohman EM, Chen AY, Wang TY, Peterson ED, Roe MT, Holper EM, on behalf of the CRUSADE and ACTION Registry-GTWG participants. Timing of in-hospital coronary artery bypass graft surgery for non-ST-segment elevation myocardial infarction patients: results from the National Cardiovascular Data Registry ACTION Registry-GWTG (Acute Coronary Treatment and Intervention Outcomes Network Registry-Get With The Guidelines). JACC Cardiovasc Interv 3:419-27, 2010.
96. Peltz M, Milchgrub S, Jessen ME, Meyer DM: Effect pyruvate and HEPES on rat lung allograft acidosis and cell death after long-term hypothermic storage. Transplant Proc 42:2771-6, 2010.
97. Peltz M, Edwards LB, Jessen ME, Torres F, Meyer DM: HLA mismatches influence lung transplant recipient survival, bronchiolitis obliterans, and rejection: Implications for donor lung allocation. J Heart Lung Transplant 30:426-34, 2011.
98. Peltz M, Merritt ME, Rosenbaum DH, Ammann L, Jessen ME: <sup>1</sup>H Magic Angle Spinning MRS for monitoring machine perfused canine donor heart preservation prior to transplantation. J Heart Lung Transplant 30:730-1, 2011.
99. Knowles M, Murphy EH, DiMaio JM, Modrall JG, Timaran CH, Jessen ME, Arko FR: The effects of operative indication and urgency of intervention on patient outcomes after thoracic aortic endografting. J Vasc Surg 53:926-34, 2011.

100. Murphy EH, DiMaio JM, Jessen ME, Arko FR: Technique for branched thoracic stent-graft repair of a chronic type A aortic dissection in a patient with multiple prior sternotomies. J Endovasc Ther 18:359–364, 2011.
101. Cobert ML, Merritt ME, West LM, Jessen ME, Peltz M: Differences in regional myocardial perfusion, metabolism, MVO<sub>2</sub> and edema after coronary sinus machine perfusion preservation of canine hearts. ASAIO J 57:481-6, 2011.
102. Stanley GA, Murphy EH, Knowles M, Ilves M, Jessen ME, DiMaio JM, Modrall JG, Arko FR: Volumetric analysis of type B aortic dissections treated with thoracic endovascular aortic repair. J Vasc Surg 54:985-92, 2011
103. Hillis LD, Smith PK, Anderson JL, Bridges CR, Byrne JG, Cigarroa JG, DiSesa VJ, Hiratzka LF, Hutter AM Jr, Jessen ME, Keeley EC, Lahey S, Lange RA, London MJ, Mack MJ, Patel MR, Puskas JD, Sabik JF, Selnes O, Shahian DM, Trost JC, Winniford MD. 2011 ACCF/AHA Guideline for Coronary Bypass Graft Surgery: Executive Summary: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. J Am Coll Cardiol 58:2584-2614, 2011.  
Also appears as: J Thorac Cardiovasc Surg 143:4-34, 2012; Circulation 124:2610-42, 2011, and Anesth Analg 114(1):11-45, 2012.
104. Hillis LD, Smith PK, Anderson JL, Bridges CR, Byrne JG, Cigarroa JG, DiSesa VJ, Hiratzka LF, Hutter AM Jr, Jessen ME, Keeley EC, Lahey S, Lange RA, London MJ, Mack MJ, Patel MR, Puskas JD, Sabik JF, Selnes O, Shahian DM, Trost JC, Winniford MD. 2011 ACCF/AHA Guideline for Coronary Bypass Graft Surgery: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. J Am Coll Cardiol 58:e123-e210, 2011.  
Also appears as: Circulation 124:e652-735, 2011
105. Murphy EH, Stanley GA, Ilves M, Knowles M, DiMaio JM, Jessen ME, Arko FR: Thoracic endovascular repair (TEVAR) in the management of aortic arch pathology. Ann Vasc Surg 26:55-66, 2012.
106. Cobert ML, Peltz M, West LM, Merritt ME, Jessen ME: Glucose is an ineffective substrate for preservation of machine perfused donor hearts. J Surg Res 173:198-205, 2012.
107. Abd-Elfattah AS, Ding M, Jessen ME, Wechsler AS: On-pump inhibition of es-ENT1 transporter and adenosine deaminase during aortic cross-clamping entraps intracellular adenosine and protects against reperfusion injury: Role of adenosine A1-receptors. J Thorac Cardiovasc Surg 144:243-9, 2012.
108. Stanley GA, Arko FR, Foteh MI, Jessen, ME, DiMaio JM: Hybrid endovascular treatment of an anomalous right subclavian artery dissection in a patient with Marfan syndrome. Ann Thorac Surg 94:639-41, 2012

109. Banerjee S, Master RG, Peltz M, Willis B, Mohamed A, Bertis BB, DiMaio JM, Jessen ME; Brilakis ES. Influence of chronic total occlusions on coronary artery bypass graft surgical outcomes. J Card Surg 27:662-7, 2012.
110. Nelson JD, Mikhael PM, Wait MA, Kuykendall BJ, Nettle KA, Jessen ME, Meyer DM: Impact of mitral valve repair in patients with end-stage heart failure. World J Cardiovasc Surg 2:86-90, 2012.
111. Bakaeen FG, Chu D, Kelly RF, Ward HB, Jessen ME, Chen GJ, Petersen NJ, Holman WL: Performing coronary artery bypass grafting off pump may compromise long-term survival in a veteran population. Ann Thorac Surg 95:1952-1960, 2013.
112. Abd-Elfattah AS, Tuchy GE, Jessen ME, Salter DR, Goldstein JP, Brunsting, LA III, Wechsler AS: Hot shot induction and reperfusion with a specific blocker of the es-ENT1 nucleoside transporter before and after hypothermic cardioplegia abolishes myocardial stunning in acutely ischemic hearts, despite of metabolic derangement: Hot shot-drug delivery before hypothermic cardioplegia. J Thorac Cardiovasc Surg 146:961-970.e3, 2013.
113. Bakaeen FG, Kelly RF, Chu D, Jessen ME, Ward HB, Holman WL: Trends over time in the relative use and associated mortality of on-pump and off-pump coronary bypass grafting in the Veterans Affairs system. JAMA Surg 148:1031-6, 2013.
114. Xie M, Kong Y, Tan W, May H, Battiprolu PK, Pedrozo Z, Wang Z, Morales C, Luo X, Cho G, Jiang N, Jessen ME, Warner JJ, Lavandero S, Gillette TG, Turer AT, Hill JA. Histone deacetylase inhibition blunts ischemia/reperfusion injury by inducing cardiomyocyte autophagy. Circulation 129:1139-1151, 2014.
115. Bakaeen FG, Chu D, Kelly RF, Holman WL, Jessen ME, Ward HB: Perioperative outcomes after on- and off-pump coronary artery bypass grafting. Tex Heart Inst J 41(2):144-51, 2014.
116. Brant S, Rosenbaum D; West L, Jessen ME, Peltz M: Effects of antegrade and retrograde machine perfusion preservation on cardiac function after transplantation in canines. Transplant Proc 46:1601-5, 2014.
117. Cobert ML, Merritt ME, West LM, Jessen ME, Peltz M: Metabolic characteristics of human hearts preserved for 12 hours by static storage, antegrade perfusion or retrograde coronary sinus perfusion. J Thorac Cardiovasc Surg 148:2310-5, 2014.
118. Brant SM, Cobert ML, West LM, Shelton JM, Jessen ME, Peltz M: Characterizing cardiac donation after circulatory death – implications for perfusion preservation. Ann Thorac Surg 98:2107-14, 2014.

119. Greilich PE, Edson E, Rutland L, Jessen ME, Key NS, Levy JH, Faraday N, Steiner ME: Protocol adherence when managing massive bleeding following complex cardiac surgery: A study design pilot. J Cardiothorac Vasc Anesth 29:303-10, 2015.
120. Karkouti K, Grocott HP, Hall R, Jessen ME, Kruger C, Lerner AB, MacAdams C, Mazer CD, de Medicis E, Myles P, Ralley F, Rheault MR, Rochon A, Slaughter MS, Sternlicht A, Syed S, Waters T: Interrelationship of preoperative anemia, intraoperative anemia, and red blood cell transfusion as potentially modifiable risk factors for acute kidney injury in cardiac surgery: a historical multicentre cohort study Can J Anesth 62(4):377-84, 2015.
121. Kotsia A, Papafaklis MI, Michael TT, Rangan BV, Peltz M, Roesle M, Jessen M, Willis B, Christopoulos G, Nakas G, Giannitsi S, Michalis LK, Fotiadis DI, Banerjee S, Brilakis E: Serial multimodality evaluation of aortocoronary bypass grafts during the first year after coronary artery bypass graft surgery: Insights from the Cardiac Catheterization for Bypass Graft Patency Rate Optimization (CABG-PRO) study. J Am Coll Cardiol Img 8(11):1341-1343, 2015.
122. Brant SM, Holmes C, Cobert ML, West L, Shelton M, Jessen ME, Peltz M: Successful transplantation in canines after long-term coronary sinus machine perfusion preservation of donor hearts, J Heart Lung Transplant (in press). <http://dx.doi.org/10.1016/j.healun.2016.03.007>
123. Holmes C, Powell, L, Clarke N, Jessen M, Peltz M: Influence of Metformin and Insulin on Myocardial Substrate Oxidation under Conditions encountered during Cardiac Surgery, J Surgery (In press)

## **ABSTRACTS**

1. Downs AP, Jessen M, Lye C: Peripheral nerve injuries following carotid endarterectomy. Annals RCPSC, 17(4):367, 1984.
2. Abd-Elfattah AS, Jessen ME, Lekven J, Brunsting LA, Mask WK, Wechsler AS: Pharmacological intervention for the prevention of reperfusion injury using specific inhibitors of adenine nucleoside transport and adenosine catabolism. Cardiovasc Drugs Therapy, 1(3):210, 1987.
3. Abd-Elfattah AS, Jessen, ME, Lekven J, Doherty NE, Brunsting LA, Wechsler AS: The role of myocardial hypoxanthine and xanthine in "free-radical-mediated" reperfusion injury. Circulation, 76(suppl IV):287, 1987.
4. Lekven J, Brunsting LA, Jessen ME, Abd-Elfattah AS, Doherty NE, Wechsler AS: Myocardial oxygen utilization with epinephrine in ischemically injured hearts. Circulation, 76(suppl IV):286, 1987.

5. Mask WK, Abd-Elfattah AS, Jessen ME, Lekven J, Wechsler AS: Embryonic vs. adult myocardium: Adenine nucleotide metabolism during ischemia. Circulation, 76(suppl IV):454, 1987.
6. Tuchy GE, Jessen ME, Hanan SA, Abd-Elfattah AS, Maddox RP, Wechsler AS: Coronary sinus delivery of cardioplegia with metabolic inhibitors. 3rd International Symposium on Myocardial Protection via the Coronary Sinus, Vienna, Austria, 1987.
7. Abd-Elfattah AS, Jessen ME, Hanan SA, Tuchy GE, Maddox RP, Wechsler AS: New strategy for myocardial protection in ischemia and reperfusion. 3rd International Symposium on Myocardial Protection via the Coronary Sinus, Vienna, Austria, 1987.
8. Maddox RP, Jessen ME, Abd-Elfattah AS, Hanan SA, Tuchy GE, Wechsler AS: Post-ischemic ATP enhancement by specific inhibitors of adenosine catabolism and transport. Circulation, 78(suppl II):447, 1988.
9. Abd-Elfattah AS, Jessen ME, Lekven J, Wechsler AS: Is ATP derangement or free-radical mediated injury the major cause of ventricular dysfunction during reperfusion? Circulation, 80(suppl II):157, 1989.
10. Abd-Elfattah AS, Mattox RP, Hanan S, Jessen M, Tuchy GE, Wechsler AS: [3H]-adenosine uptake in ischemically injured myocardium during reperfusion: Role of outward flux via nucleoside transport. J Mol Cell Cardiol 21(suppl II):II-447, 1989.
11. Hanan SA, Jessen ME, Tuchy GE, Maddox RP, Abd-Elfattah AS, Wechsler AS: Effect of coronary collateral recruitment on ventricular recovery after brief coronary occlusion in dogs and pigs. Current Surg, 47:23-25, 1990.
12. Grohe CM, Jessen ME, Chao R, Ring WS, Williams RS: The 'CCAC Box' is essential for myoglobin promoter function in intact rat myocardium. Circulation, 84(suppl II):II-87, 1991.
13. Bender EM, Chao R, Cline D, Jessen M: Veno-ventricular extracorporeal membrane oxygenation. Circulation, 84(suppl II):II-715, 1991.
14. Vardi A, Brink LW, Jessen ME, Chao RY, Levin DL, Ring WS: Effect of ECMO flow on pulmonary capillary blood flow. Pediatric Research 31(4,Part II):37A, 1992
15. Olivari MT, Jessen ME, Baldwin BJ, Horn VPH, Yancy CW, Moncrief CL, Ring WS: Triple-drug Immunosuppression with steroid discontinuation by 6 months after cardiac transplant. 11th Annual Meeting of the American Society of Transplant Physicians, Chicago, IL, May 26-27, 1992.
16. Jessen ME, Kovarik TE, Jeffrey MH, Chao RY, Sherry AD, Ring WS, Malloy CR: Patterns of substrate oxidation in reperfused myocardium: a <sup>13</sup>C NMR study. Circulation 86 (suppl I):I-340, 1992.

17. Willard JE, Jessen ME, Gerard RD, Meidell RS: Recombinant Adenovirus is an efficient vector for *in vivo* gene transfer and can be preferentially directed at vascular or smooth muscle cells. Circulation 86(suppl I):I-473, 1992.
18. Meyer D, Jessen M, Roden J, Levin D, Eberhart R: Infection as a predictor of outcome in neonatal and pediatric ECMO. ASAIO Abstracts 22:70, 1993.
19. Meyer D, Jessen M, Levin D, Eberhart R: ECMO for pediatric and neonatal cardiac rescue: Progress and problems. ASAIO Abstracts 22:63, 1993.
20. Jessen ME, Kovarik TE, Jeffrey FM, Chao RY, Sherry AD, Ring WS, Malloy CR: <sup>13</sup>C Isotopomer analysis: A technique for analysis of intermediary metabolism in ischemic reperfused heart tissue. J Heart Failure 1(suppl):850, 1993.
21. Meyer DM, Jessen ME, Chao RY, Barak C, Lee Y: Effects of extracorporeal assisted circulation (EAC) on recovery from shock. Circ Shock Supplement 2:10, 1993.
22. Jost CMT, Yancy CW, Jessen ME, Baldwin BJ, Horn VPH, Ring WS, Olivari M-T: Exercise tolerance after heart transplant. Chest 104 (supplement): 116S, 1993.
23. Jessen ME, Maniscalco SP, Jeffrey FM, Sherry AD, Storey CJ, Chao RY, Ring WS, Malloy CR: Acetate and lactate oxidation in the perfused failing human heart. In: *Proceedings of the 12th annual meeting of the Society for Magnetic Resonance in Medicine*; August 1993. Abstract 1054.
24. Maniscalco SP, Jeffrey FM, Sherry AD, Storey CJ, Chao RY, Ring WS, Malloy CR, Jessen ME: Effects of preconditioning on lactate and acetate oxidation. Circulation 88(4, Part 2):I-530, 1993.
25. Meyer DM, Jessen ME, Eberhart RC, and the Extracorporeal Life Support Organization: Neonatal ECMO complicated by sepsis. Tenth Annual Children's National Medical Center ECMO Symposium, Keystone, CO, February 27-March 3, 1994.
26. Meyer DM, Jessen ME, and the Extracorporeal Life Support Organization: Results of extracorporeal membrane oxygenation (ECMO) in neonates with sepsis - the ELSO experience. 74th Annual Meeting of the American Association for Thoracic Surgery, New York, NY, April 24-27, 1994.
27. Meyer DM, Jessen ME, Barak C, Chao RY, Lee CL: Recovery of right ventricular function after severe hemorrhagic shock - Resuscitation using extracorporeal assisted circulation. Shock 1(suppl):8, 1994.
28. Benjamin IJ, Erikson JM, Chao R, Jessen ME, Shelton J, Richardson JA: Expression of the heat shock constitutive and inducible HSP70 isoforms in the rabbit ischemic heart. Clinical Research 42:168A, 1994.



29. Benjamin IJ, Erikson JM, Chao R, Jessen ME, Shelton J, Richardson JA: Diverse signals induce regional expression of the HSP70 isoforms in the ischemic rabbit heart. *The Biology of Heat Shock Proteins and Molecular Chaperones*, Cole Spring Harbor, May 4-8, 1994.
30. Meyer DM, Grayburn PA, Jessen ME: The use of echocardiography to detect cardiac injury after penetrating thoracic trauma - a prospective study. 1994 Annual Meeting of the American Association for the Surgery of Trauma, San Diego CA, September 29-30, 1994.
31. Eberhart RC, Jessen ME, Dollar ML, Constantinescu A, Chao R, Estes K, Kulkarni PV, Ring WS: Platelet and neutrophil affinities of heparin treated cardiopulmonary bypass circuits. Presented at Symposium on Artificial Heart Research and Development (AHRD), Moscow, June 1994.
32. Barak C, Reed MK, Malloy CR, Sherry AD, Maniscalco SP, Jessen ME: Effect of Dichloroacetate on myocardial substrate selection by <sup>13</sup>C-MRS. In: *Proceedings of the 2nd Meeting of the Society for Magnetic Resonance*; August 1994. Abstract 1233.
33. Benjamin IJ, Chao R, Jessen ME, Shelton J, Richardson JA: Cellular and regional expression of the major Hsp70 isoforms in the ischemic rabbit heart. Circulation 90(4, Part 2):I-536, 1994.
34. Jessen ME, Constantinescu A, Dollar ML, Chao RY, Kulkarni PV, Eberhart RC: Platelet and neutrophil deposition on membrane oxygenator circuits studied by noninvasive dual isotope scintigraphy. Presented at the ASAIO Cardiovascular Science and Technology Conference, Washington DC, December 9-11, 1994.
35. Jessen M, Kulkarni P, Constantinescu A., Eberhart R, Li J: Influence of blood flow and surface characteristics on cell adhesion on membrane oxygenator circuit surfaces. ASAIO J 41(1, suppl):63, 1995.
36. Eberhart R, Jessen M, Chao R, Li J, Sly K, Harris F, Raja S, Pandit A, Natarayan S, Constantinescu A, Kulkarni P, Prager M: Platelet response to membrane oxygenator treatments with heparin, SMA, and nitric oxide. Artificial Organs 19:1047, 1995.
37. Barak C, Reed MK, Malloy CR, Maniscalco SP, Jessen ME: Effects of pyruvate on pyruvate carboxylation and substrate selection in the heart. In: *Proceedings of the 3rd Meeting of the Society for Magnetic Resonance*; August 1995. Abstract 1620.
38. Li J, Eberhart RC, Sly MK, Harris FB, Natarayan S, Pandit A, Rajasubramanian S, Jessen ME, Chao R, Kulkarni PV, Constantinescu A, Douglass D: Platelet and neutrophil responses to cardiopulmonary bypass studied by gamma scintigraphy and platelet aggregometry. 17th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Montreal Canada, September 1995.

39. Eberhart RC, Li J, Harris FB, Sly MK, Shastri P, Jessen ME, Chao R, Constantinescu A, Kulkarni PV: Scintigraphic analysis of cell adhesion in oxygenators and internal organs. In: *Transactions of the Fifth World Biomaterials Congress, Volume II-107, May 29-June 2, 1996.*
40. Meyer DM, Jessen ME and the Extracorporeal Life Support Organization: Results of Extracorporeal Membrane Oxygenation (ECMO) in Children. Twelfth Annual Children's National Medical Center ECMO Symposium, Keystone, CO, February 25-29, 1996.
41. Jessen M, Li J, Harris F, Sly M, Shastri P, Bhujle R, Gaffke J, Clift J, Ye Y, Kulkarni P, Constantinescu A, Chao R, Eberhart R: Platelet and neutrophil distributions in pump- oxygenator circuits. I. Influence of "SMA" surface treatment. ASAIO J 42:21, 1996.
42. Sly M, Prager M, Li J, Harris F, Shastri P, Chao R, Kulkarni P, Constantinescu A, Jessen M, Eberhart R: Platelet and neutrophil distributions in pump-oxygenator circuits. II. Influence of nitric oxide gas infusion. ASAIO J 42:21, 1996.
43. Jessen M, Li J, Dollar M, Ching P, Harris F, Sly M, Srinivasan N, Raja S, Kulkarni P, Constantinescu A, Chao R, Eberhart R: Platelet and neutrophil distributions in pump-oxygenator circuits. III. Influence of "Carmeda" heparin treatment. ASAIO J 42:21, 1996.
44. Reed MK, Barak C, Malloy CR, Maniscalco SP, Jessen ME: Increasing anaplerosis improves cardiac function after ischemia. In: *Proceedings of the 4th Meeting of the International Society for Magnetic Resonance in Medicine*; April 1996. Abstract 1035.
45. Eberhart RC, Li J, Sly MK, Shastri P, Bhujle R, Gaffke J, Ye YW, Jessen ME, Chao R, Constantinescu A, Kulkarni PV: Scintigraphic analysis of cell adhesion in oxygenators and internal organs. 6th International Symposium on the Artificial Heart and Assist Devices. Tokyo, Japan July 30-31, 1996.
46. Willett DL, Hall SA, Brickner E, Jessen ME, Wait MA, Grayburn PA: Quantitation of aortic regurgitation by color flow mapping of the vena contracta: intraoperative validation in man. Circulation 94(8, suppl I):I-492, 1996.
47. Kessler DJ, Keffer JH, Joglar JA, Williams N, Canby RC, Jessen ME, Page RL: Evidence for myocardial injury associated with intra-operative endocardial ICD testing. Circulation 94(8, suppl I):I-563, 1996.
48. Meyer DM, Jessen ME, Wait MA, Estrera AS: Early evacuation of traumatic hemothoraces using thoracoscopy - a prospective randomized trial. 33rd Annual Meeting of the Society of Thoracic Surgeons, San Diego, CA, February 2-5, 1997.

49. Eberhart RC, Li J, Sly MK, Shastri P, Bhujle R, Gaffke J, Clift J, Ye Y-W, Jessen ME, Chao R, Prager MD, Constantinescu A, Kulkarni PV: Scintigraphic analysis of platelet and neutrophil deposition in oxygenators and internal organs. 23rd Annual Meeting of the Society for Biomaterials, New Orleans, LA, April 30-May 4, 1997.
50. Bhujle R, Li J, Shastri P, Gaffke J, Clift J, Ye Y, Chao R, Constantinescu A, Kulkarni P, Jessen M, Eberhart R: Influence of cardiopulmonary bypass on platelet and neutrophil accumulations in internal organs. ASAIO J 43:36, 1997.
51. Rajasubramanian S, Shastri P, Constantinescu A, Nelson K, Kulkarni P, Jessen M, Eberhart R: Influence of blood flow path on microporous oxygenator performance. ASAIO J 43:15, 1997
52. Meyer DM, Jessen ME, Yancy C, Solomon M, Ring WS: Myocardial revascularization as a strategy in end-stage ischemic cardiomyopathy. J Heart Failure 4:150, 1997.
53. Eberhart RC, Li J, Kulkarni PV, Constantinescu A, Jessen ME: Imaging platelets and neutrophils in artificial and internal organs by quantitative gamma scintigraphy. Ann Biomed Engineer 25(suppl 1): S-66, 1997.
54. Tauriainen MP, Jessen ME, Malloy CR, Sherry AD, Meyer DM: Pulmonary substrate oxidation in vivo following intravenous <sup>13</sup>C labeled lactate and acetate. In: *Proceedings of the 6th Scientific Meeting of the International Society for Magnetic Resonance in Medicine*; April 1998, Abstract 1819.
55. Reed MK, Tauriainen MP, Malloy CR, Chao RY, Jessen ME: Secondary cardioplegia suppresses fatty acid oxidation and improves post-ischemic ventricular function. In: *Proceedings of the 6th Scientific Meeting of the International Society for Magnetic Resonance in Medicine*; April, 1998, Abstract 1817.
56. Tauriainen MP, Reed MK, Malloy CR, Sudarshan S, Chao RY, Jessen ME: Potassium cardioplegia suppresses neonatal myocardial fatty acid metabolism. In: *Proceedings of the 6th Scientific Meeting of the International Society for Magnetic Resonance in Medicine*; April, 1998, Abstract 1818.
57. Prager MD, Eberhart RC, Jessen M, Sly MK: Nitric oxide inhibition of platelet activation during cardiopulmonary bypass. Br J Haematol 102:358 (abstract P-1432), 1998.
58. Greilich PE, Jessen ME, Padakandla UB, Latham P, Cooley MV, Harris DN, Whitten CW: In vitro reversal of heparin's effect on refractometry and modified thromboelastography (TEG) in whole blood. Anesth Analg 86:SCA103, 1998.

59. Chin A, Meyer D, Jessen M, Rogers T, Johnson P, Tan S: Endoscopic cardiovascular vessel harvesting. 6th World Congress of Endoscopic Surgery Rome, Italy, June 3-6, 1998
60. Meyer PE, Malik K, Chao RY, Patel JB, Malloy CR, Meyer DM, Jessen ME: The influence of erythrocytes on substrate competition in isolated hearts: Implications for studies of myocardial energetics. In: *Proceedings of the 7th Scientific Meeting of the International Society for Magnetic Resonance in Medicine*; April, 1999, Abstract 1496.
61. Greilich PE, Levy JH, Jessen ME, Goodnough LT, Parr G, Stewart RW, Gratz I, Wahr J, Williams J, Comunale M, Vlahakes GJ: HBOC-201 is more effective than red cells (RBC) in treating hemodynamic instability in patients following cardiopulmonary bypass (CPB) surgery. Anesth Analg 88:S79, 1999.
62. Latham P, Greilich PE, DiCorte CJ, Cooley MV, Grayburn PA, Jessen ME: Esophageal Doppler Monitoring: Effects of preload, afterload, and contractility on peak velocity. Anesth Analg 88:S87, 1999.
63. Zarate E, Bossard R, Latham P, Downing L, Jessen M, Ring S. White PF: Fast-tracking after cardiac surgery: Effect of intrathecal morphine on postoperative pain, opioid requirement and extubation time. Anesth Analg 88:S111, 1999.
64. Zarate E, Bossard R, Morse L, Shi C, Chi L, Jessen M, Ring S. White PF: A comparison of remifentanyl and sufentanyl in combination with desflurane for fast-tracking after cardiac surgery. Anesth Analg 88:S405, 1999.
65. DiCorte CJ, Latham P, Greilich PE, Cooley MT, Grayburn PA, Jessen ME: Pulmonary artery catheter vs. esophageal doppler monitor: Measurement of cardiac output and left ventricular filling during cardiac surgery. Anesth Analg 88:SCA37, 1999.
66. Meyer PE, Malik K, Chao RY, Patel JB, Malloy CR, Meyer DM, Jessen ME: Influence of erythrocytes on myocardial substrate oxidation: Implications for studies of blood reperfusion. 25<sup>th</sup> Annual Meeting of the Western Thoracic Surgical Association, Olympic Valley, CA, June 24-26, 1999.
67. Gilbert NF, Meyer PE, Tauriainen MP, Chao RY, Patel JB, Malloy CR, Jessen ME: Effects of Hypothermia on Myocardial Substrate Metabolism. Circulation 100:I-591, 1999.
68. Meyer PE, Jessen ME, Patel JB, Chao RY, Malloy CR, Meyer DM: Substrate metabolism in the preserved rat lung: A <sup>13</sup>C NMR study. 46<sup>th</sup> Annual Meeting of the Southern Surgical Association, Rio Mar, Puerto Rico, November 4-6, 1999.
69. Greilich PE, Jessen ME, Beckham JM, Verret DJ, Whitten CW: Postoperative effects of antifibrinolytic therapy on platelet glycoprotein IB expression following cardiopulmonary bypass (CPB). Anesthesiology 91:A80, 1999.

70. Meyer PE, Jessen ME, Patel JB, Smith ME, Chao RY, Mendelson CR, Meyer DM: Surfactant protein mRNA expression after lung storage for transplantation. 61<sup>st</sup> Annual Meeting of the Society of University Surgeons, Toronto, Canada, February 9-12, 2000.
71. Meyer PE, Chao RY, Patel JB, McGarry JD, Jessen ME: Cardiac substrate oxidation after acute carnitine palmitoyl transferase-I suppression. In: *Proceedings of the 8th Scientific Meeting of the International Society for Magnetic Resonance in Medicine*; April, 2000, Abstract 1637.
72. Meyer PE, Jeffrey FMH, Jessen ME, Chao RY, Patel JB, Meyer DM: Measurement of oxygen consumption in lung tissue by <sup>13</sup>C NMR. In: *Proceedings of the 8th Scientific Meeting of the International Society for Magnetic Resonance in Medicine*; April, 2000, Abstract 1855.
73. Shi C, Morse L, Downing LK, Chi L, Jessen ME: Optimizing intraoperative volume management during coronary bypass surgery. Anesthesiology 93:A347, 2000.
74. Freeman RK, Al-Dossari G, Jessen ME, Meyer DM, DiMaio JM: Indications for utilizing video assisted thoracoscopic surgery to diagnose diaphragm injuries following penetrating chest trauma. 47<sup>th</sup> Annual Meeting of the Southern Thoracic Surgical Association, Marco Island, FL, Nov. 8-10, 2000.
75. Greilich PE, Jessen ME, Okada K, Latham P, Whitten CW: Effects of antifibrinolytic therapy on Interleukins 6 and 10 in patients undergoing extracorporeal circulation: A randomized, double-blind, placebo-controlled study. Circulation 102:II-557, 2000.
76. Eberhart R, Li J, Constantinescu A, Kulkarni P, Chao R, Jessen M: Surface modification and analysis of oxygenators. International Symposium on Biomaterials and Drug Delivery Systems, Cheju, Korea, August 20, 2000.
77. Hamilton TT, Meyer PE, Tauriainen MP, Chao RY, Jessen ME: Myocardial substrate oxidation during arrest with potassium chloride or tetrodotoxin. 62<sup>nd</sup> Annual Meeting of the Society of University Surgeons, Chicago, IL, Feb. 8-10, 2001.
78. Brouse CF, Greilich PE, Kumar R, Downing L, Curry R, Eberhart RC, Jessen ME: OPCAB significantly reduces monocyte and neutrophil CD11b expression in patients undergoing cardiac surgery. Anesth Analg 92:SCA11, 2001.
79. Latham P, Greilich PE, Okada K, Hanley SC, Morse LS, DiMaio JM, Jessen ME: Aprotinin and off-bypass CABG reduce Interleukin-10 in patients undergoing CABG. Anesth Analg 92:SCA15, 2001.

80. Hamilton TT, Meyer PE, Tauriainen MP, Chao RY, Jessen ME: Myocardial substrate oxidation during cardioplegic arrest with potassium chloride or tetrodotoxin. In: *Proceedings of the 9th Scientific Meeting of the International Society for Magnetic Resonance in Medicine*; April, 2001, Abstract 1064.
81. Hamilton TT, Chao RY, Merritt M, Adams L, Jessen ME: The substrate oxidation effects of potassium cardioplegia (PC) are not mediated by mitochondrial  $K_{ATP}$  ( $mK_{ATP}$ ) channels. Scientific Conference on Molecular, Integrative, and Clinical Approaches to Myocardial Ischemia. Seattle, WA, Aug. 9-11,2001.
82. Greilich PE, Brouse CF, Rinder CS, Smith BR, Jessen ME:  $\epsilon$ -Aminocaproic acid reduces monocyte activation and monocyte-platelet conjugate formation in patients undergoing cardiopulmonary bypass surgery. *Anesthesiology* 95:A211, 2001.
83. Hamilton TT, Chao RY, Merritt M, Adams L, Jessen ME: Potassium cardioplegia (PC) eliminates the substrate oxidation effects of mitochondrial  $K_{ATP}$  ( $mK_{ATP}$ ) channel manipulation. *Circulation* 104(suppl II):II-688, 2001.
84. Hamilton TT, Jessen ME: PulseCO: Accurate monitoring of cardiac output from the arterial waveform. 8<sup>th</sup> Annual Cardiothoracic Techniques and Technologies Meeting, Miami Beach, FL, Jan. 23-26, 2002.
85. Hamilton TT, Jessen ME, Chao RY, He T-T, Meyer DM: Aerobic metabolism during lung preservation. 63<sup>rd</sup> Annual Meeting of the Society of University Surgeons, Honolulu, HI, Feb. 13-16, 2002.
86. Wheatley G, Hutcheson KA, Karandikar M, Pradeep PA, Gallardo T, Shohet RV, Jessen ME, Garry DJ, Williams RS, DiMaio JM: Understanding of gene expression following myocardial infarction in mice may guide molecular treatment strategies. 63<sup>rd</sup> Annual Meeting of the Society of University Surgeons, Hawaii, February 13-16, 2002.
87. Hamilton TT, Quin JA, Huber LM, Meyer DM, Wait MA, DiMaio JM, Ring WS, Jessen ME: Do heart transplant recipients that avoid blood transfusion fare better? *J Heart Lung Transplant* 21:95, 2002 [Abstract 112].
88. Meyer DM, Bennett LE, Torres F, Jessen ME, Novick RJ: Impact of recipient age and procedure type on survival following lung transplantation for interstitial pulmonary fibrosis. *J Heart Lung Transplant* 21:143, 2002 [Abstract 245].
89. Ring WS, DiMaio JM, Jessen ME, Kaiser PA, Meyer DM, Moncrief CL, Wait MA, Hamilton TT, Hutcheson KA, Karandikar M, Baldwin BJ, Boehrer JD, Horn VP, Yancy CW: Steroid withdrawal improves late survival after heart transplantation: 10 year follow-up. *J Heart Lung Transplant* 21:167, 2002 [Abstract 312].

90. Hutcheson KA, Rosenberg PB, Jessen ME, Bassel-Duby R, Williams RS, DiMaio JM. Chronic cardiac pacing in mice to study molecular pathways of heart failure. Circulation 105(14):e86-119, 2002 [Abstract 128]
91. Brouse CF, Nguyen KT, Greilich PE, Rinder HM, Jessen ME, DiMaio JM, Smith BR, Eberhart RC: "Off-Pump" coronary artery bypass surgery reduces monocyte-platelet conjugate formation. ASAIO J 48:169, 2002.
92. Greilich P, Brouse C, Latham P, Whitten C, Nguyen T, Jessen M: Optimally-dosed  $\epsilon$ -aminocaproic acid and high-dose aprotinin reduces proinflammatory cytokine levels following cardiopulmonary bypass surgery. Anesth Analg 94:SCA13, 2002.
93. Hamilton TT, He T-T, Chao RY, Jessen ME, Meyer DM: Composition of the preservation solution affects metabolism of stored pulmonary allografts. In: *Proceedings of the 10th Scientific Meeting of the International Society for Magnetic Resonance in Medicine*; May, 2002, Abstract 2189.
94. Hamilton TT, Jessen ME, Chao RY, He T-T, Meyer DM: Oxygen availability and glucose oxidation during lung preservation for transplantation. In: *Proceedings of the 10th Scientific Meeting of the International Society for Magnetic Resonance in Medicine*; May, 2002, Abstract 2190.
95. Hamilton TT, Jessen ME, Chao RY, Adams LD, Meyer DM: The effect of flow rate on substrate metabolism in the isolated perfused lung model. In: *Proceedings of the 10th Scientific Meeting of the International Society for Magnetic Resonance in Medicine*; May, 2002, Abstract 2530.
96. Hamilton TT, Jessen ME, Chao RY, He T-T, Adams GA, Meyer, DM: Increasing Oxidative Metabolism During Preservation of Pulmonary Allografts. J Am Coll Surg 195(3S):S27-8, 2002.
97. Brouse CF, Greilich PE, Eberhart RC, Shi C, Jessen ME: High-dose  $\epsilon$ -aminocaproic acid and full-dose aprotinin blunt neutrophil CD11b upregulation during cardiopulmonary bypass. Anesthesiology 96:A326, 2002.
98. Greilich PE, Brouse CF, Beckham J, Carr ME, Jessen ME. Effect of  $\epsilon$ -aminocaproic acid and aprotinin on platelet structure and function in patients undergoing cardiopulmonary bypass surgery. Anesthesiology 96:A124, 2002.
99. Greilich PE, Brouse CF, Wilson JS, Morse L, Jessen ME: Effect of high dose  $\epsilon$ -aminocaproic acid and full dose aprotinin on fibrinolysis and blood loss in patients undergoing primary cardiac surgery: A randomized, double-blind, placebo-controlled study. Anesthesiology 96:A188, 2002.
100. Wheatley GH, Karandikar M, Hutchinson K, Jessen M, Hamilton T, Yancy C, Ring WS, DiMaio JM: Does reduction of immunosuppression decrease the incidence of

lung cancer following heart transplantation? 3rd Annual Winter Symposium of the American Society of Transplant Surgeons, Miami Beach, FL, Jan 24-6, 2003.

101. Greilich PE, Brouse CF, Rinder CS, Downing LK, Jessen ME: Off-pump coronary artery bypass grafting surgery preserves platelet glycoprotein Ib expression but does not prevent platelet activation. Anesth Analg 96:SCA14, 2003.

102. Peltz M, Hamilton TT, He T, Adams GA, Chao RY, Jessen ME, Meyer DM: Increasing oxidative metabolism during storage does not harm lung function. Cardiothoracic Transplantation 2003: An International Update, Vail CO, Feb 22-26, 2003.

103. Peltz M, Hamilton TT, He T, Adams GA, Chao RY, Jessen ME, Meyer DM: Effects of increasing oxidative metabolism on stored pulmonary allograft function. In: *Proceedings of the 11th Scientific Meeting of the International Society for Magnetic Resonance in Medicine*; May, 2003, Abstract 2190.

104. Wheatley GH, Karandikar M, Hutcheson K, Jessen M, Hamilton T, Yancy C, Ring WS, DiMaio JM: Increased need for early lung cancer screening in heart transplant patients. Fourth International Lung Cancer Congress, Maui HI, June 25-8, 2003.

105. Peltz M, He T, Adams G, Chao R, Jessen M, Meyer D: Relative Contributions of Exogenous Substrates to Donor Lung Oxidative Metabolism During Short and Long-Term Hypothermic Storage. 89th Annual Clinical Congress of the American College of Surgeons, poster session, Chicago, IL, Oct 20-24, 2003.

106. DiMaio JM, Paul MC, Wait MA, Meyer DM, Jessen ME, Ring WS. Improved pulmonary function using a continuous infusion of a local anesthetic for pain management following thoracotomy. 89<sup>th</sup> Annual Clinical Congress of the American College of Surgeons, papers session, Chicago, IL, October 20-24, 2003.

107. Peltz M, He T, Adams G, Chao R, Jessen M, Meyer D: Pyruvate-modified Perfadex<sup>®</sup> improves lung preservation after 24 hour storage. J Cardiovasc Surg 44(5-suppl 1):69 2003.

108. Wheatley GH, Karandikar M, Hutcheson K, Jessen M, Hamilton T, Yancy C, Ring WS, DiMaio JM: Increased need for early lung cancer screening in heart transplant patients. J Cardiovasc Surg 44(5-suppl 1):50, 2003.

109. Peltz M, He T-T, Adams GA, Chao RY, Jessen ME: Myocardial redox state influences substrate oxidation during cardioplegic arrest. 65<sup>th</sup> Annual Meeting of the Society of University Surgeons, St. Louis, MO, Feb 11-14, 2004.

110. Wheatley GH, Wait MA, Jessen ME: Aortic homograft use for infective endocarditis associated with a scorpion sting. 10th Annual Cardiothoracic Techniques & Technologies (CTT) Meeting, Miami Beach, FL, March 10-13, 2004.



111. Wheatley GH, Yancy CW, Wait MA, Meyer DM, Jessen ME, Paul MC, Kaiser P, Bhojani RA, Drazner M, Ring WS, DiMaio JM: Renal function is preserved following heart transplantation using IL-2 receptor blockade. J Heart Lung Transplant 23:S140, 2004 [Abstract 291].
112. Peltz M, He T-T, Adams GA, Chao RY, Jessen ME: Factors affecting fatty acid oxidation in the potassium arrested heart. In: *Proceedings of the 12th Scientific Meeting of the International Society for Magnetic Resonance in Medicine*; May, 2004, Abstract 1782.
113. Peltz M, Douglass D, Meyer DM, Wait MA, Ring WS, Jessen ME: Hypothermic circulatory arrest for repair of injuries of the thoracic aorta and great vessels. Interact Cardiovasc Thorac Surg 3(Suppl 1):S54, 2004 [Abstract CP16].
114. Peltz M, He T-T, Adams GA, Chao RY, Jessen ME, Meyer DM: Effect of Pyruvate and HEPES on Pulmonary Allograft Acidosis and Cell Death After Long-Term Storage. J Am Coll Surg 199(3S):S31, 2004.
115. Dobrilovic N, Hirsch B, Sallach SM, Paul MC, Peterson GE, Wait MA, Ring WS, Jessen ME, Pappas P, Cabell C, DiMaio JM. The presence of a new murmur may predict improved survival among patients treated surgically for infective endocarditis. American College of Chest Physicians, Cardiac and General Thoracic Surgery Update 2004, Scottsdale, AZ, December 10-12, 2004.
116. Rosenbaum DH, Bhojani RA, Kaiser PA, Meyer DM, Jessen ME, Wait MA, Moncrief C, Baldwin B, Boehrer J, Horn V, Yancy CW, Ring WS, DiMaio JM. Early steroid withdrawal improves late survival after heart transplantation: 14 year results. American Society of Transplant Surgeons State of the Art Winter Symposium - The Science & Art of Immunosuppression, Miami Beach, FL, January 21-23, 2005.
117. Peltz M, He T-T, Adams GA, Koshy S, Burgess SC, Chao RY, Meyer DM, Jessen ME: Preservation perfusion maintains myocardial ATP levels and reduces apoptosis in an ex-vivo rat heart transplantation model. 66<sup>th</sup> Annual Meeting of the Society of University Surgeons, Nashville, TN, Feb 9-12, 2005.
118. Dobrilovic N, Hirsch BR, Sallach SM, Paul MC, Peterson GE, Wait MA, Ring WS, Jessen ME, Pappas P, Cabell C, DiMaio JM: Outcomes comparison of aortic valve versus mitral valve involvement among surgically treated infective endocarditis patients. 66<sup>th</sup> Annual Meeting of the Society of University Surgeons, Nashville, TN, Feb 9-12, 2005.
119. Management of blunt aortic injury in 2004: A paradigm shift? Timothy T. Hamilton, MD, Pooja D. Thakrar, BS, Nikola Dobrilovic, MD, Michelle C. Paul, BS, Matthias Peltz, MD, Michael E. Jessen, MD, FACS, Michael A. Wait, MD, FACS, and J. Michael DiMaio, MD, FACS. Scientific Session of the Annual Meeting of the American College of Surgeons Committee on Trauma, Washington, DC, March 3, 2005

120. Peltz M, He T-T, Adams GA, Koshy S, Burgess SC, Chao RY, Meyer DM, Jessen ME: Characterizing myocardial metabolism during hypothermic storage by carbon-13 and proton MRS: Implications for cardiac transplantation. In: *Proceedings of the 13th Scientific Meeting of the International Society for Magnetic Resonance in Medicine*; May 7-13, 2005, Abstract 833.
121. Dobrilovic N, Hirsch BR, Sallach SM, Paul MC, Peterson GE, Wait MA, Jessen ME, Ring WS, Cabell C, Pappas P, DiMaio JM: Evaluation of preoperative risk factors predictive of mortality among patients treated surgically for infective endocarditis. Circulation 111(2):e316, 2005 [Abstract P28]
122. Dobrilovic N, Hirsch BR, Sallach SM, Paul MC, Peterson GE, Wait MA, Jessen ME, Ring WS, Cabell C, Pappas P, DiMaio JM: Diabetics have increased incidence of intracardiac fistulae and coronary artery disease in a large series of surgically treated infective endocarditis patients. 8<sup>th</sup> International Symposium on Modern Concepts in Endocarditis and Cardiovascular Infections. Charleston SC, May 22-24, 2005.
123. Dobrilovic N, Hirsch BR, Sallach SM, Paul MC, White MD, Wait MA, Peterson GE, Ring WS, Jessen ME, Cabell C, DiMaio JM: Predictors of adverse and favorable outcomes in patients undergoing surgery for infective endocarditis. 15<sup>th</sup> World Congress of the World Society of Cardio-Thoracic Surgeons, Vilnius, Lithuania, June 19-23, 2005.
124. Rosenbaum DH, Bhojani R, Kaiser P, Meyer D, Jessen M, Wait M, Moncrief C, Baldwin B, Boehrer J, Horn V, Yancy C, Ring WS, DiMaio JM: Early steroid withdrawal improves late survival after heart transplantation: 14 year results. 52<sup>nd</sup> Annual Meeting of the Southern Thoracic Surgical Society, Orlando, FL, Nov 10-12, 2005.
125. He T, Peltz M, Chao RY, Jessen ME, Meyer DM: Effect of oxygen content and preservation temperature on pulmonary allograft energetics, metabolism, and cell death during moderate and extended ischemic periods. J Surg Res 130:296-7, 2006 [abstract 211].
126. Peltz M, Bennett Edwards L, Jessen ME, Torres F, Meyer DM: Impact of HLA Class I and Class II mismatching on lung transplant recipient mortality, rejection and bronchiolitis obliterans. J Heart Lung Transplant 25(2S):S112, 2006 [Abstract 197].
127. Rosenbaum DH, Mitchell J, Adams B, Paul M, Kaiser P, Meyer D, Jessen M, Wait M, Rosenberg P, Drazner M, Yancy C, Ring WS, DiMaio JM: Does basiliximab decrease acute rejection and improve renal function in cardiac transplant recipients at mid-term follow-up? J Heart Lung Transplant 25(2S):S166, 2006 [Abstract 357].
128. He T, Peltz M, Chao RY, Jessen ME, Meyer DM: A magnetic resonance spectroscopy technique for evaluating lung preservation strategies. In: *Proceedings of the 14th Scientific Meeting of the International Society for Magnetic Resonance in Medicine*; May 6-12, 2006, [Abstract 1987].

129. Rosenbaum DH, Bhojani RA, Dikmen E, Kaiser PA, Paul MC, Wait MA, Meyer DM, Jessen ME, Yancy CW, Rosenblatt RL, Torres F, Perkins S, Ring WS, DiMaio JM. Routine chest CT screening in high risk cardiac transplant recipients may improve survival. Presented at the 14<sup>th</sup> SPORE Investigators' Workshop, Baltimore, MD; July 16-19, 2006.
130. Rosenbaum DH, Peltz M, DiMaio JM, Meyer DM, Wait MA, Brown R, Chao RY, Ring WS, Jessen ME: Perfusion preservation vs static preservation for cardiac transplantation: Effects on myocardial function and metabolism. Circulation 114(suppl II):II-360, 2006.
131. Rosenbaum DH, Peltz M, Merritt ME, Thatcher JE, Sasaki H, Jessen ME: Metabolic benefits of perfusion preservation in canine hearts stored for short intervals. J Surg Res 137:296-7, 2007 [Abstract P153].
132. Rosenbaum DH, Peltz M, Merritt ME, Sasaki H, Jessen ME: Cardiac Storage with a Perfusion Device Prevents Tissue Lactate Accumulation. J Heart Lung Transplant 26(2S):S65, 2007 [Abstract 12].
133. Peltz M, Merritt ME, Rosenbaum DH, Jessen ME: Magnetic resonance spectroscopy on cardiac tissue in a canine heart transplant model. In: 2007 *Proceedings of the Joint Annual Meeting of the ISMRM-ESMRMB*; May 19-25, 2007, Abstract 951.
134. Merritt ME, Peltz M, Rosenbaum DH, Ammann L, Jessen ME: Magic angle spinning MRS to evaluate cardiac preservation prior to transplantation. In: 2007 *Proceedings of the Joint Annual Meeting of the ISMRM-ESMRMB*; May 19-25, 2007, Abstract 2588.
135. Peltz M, Hamilton T, Wait MA, DiMaio JM, Meyer DM, Estrera A, Ring WS, Jessen ME: Outcomes after repair of acute and chronic traumatic thoracic aortic injuries. Interact Cardiovasc Thorac Surg 6(Suppl 1):S5-6, 2007 [Abstract CV-1].
136. May T, Downing LK, Satyanarayana N, Sarode R, Gaza J, Davis M, Jenevein E, Buck B, Jessen ME, Greilich PE: Cost:benefit analysis of thromboelastography in cardiac surgery: A process improvement approach. Transfusion 47(11):A123, 2007.
137. Murphy EH, Beck AW, DiMaio JM, Jessen ME, Arko FR: Combined aortic debranching and thoracoabdominal aortic endovascular repair (TEVAR) is effective but at a cost. 115th Scientific Session of the Western Surgical Association, Colorado Springs, CO, November 4-7, 2007
138. Peltz M, Rosenbaum DH, West L, Cobert ML, Jessen ME: Myocardial perfusion characteristics during machine perfusion for heart transplantation. J Surg Res 144:175, 2008 [Abstract 1].

139. Peltz M, Rosenbaum DH, Merritt ME, Ammann L, Jessen ME: Predicting the metabolic state of donor hearts prior to implantation in a large animal model of perfusion preservation. J Heart Lung Transplant 27(2S):S200-201, 2008 [Abstract 388].
140. Peltz M, Rosenbaum DH, West L, Cobert ML, Jessen ME: Myocardial perfusate delivery during cardiac storage with a perfusion device. J Heart Lung Transplant 27(2S):S224-225, 2008 [Abstract 455].
141. Rosenbaum DH, Mitchell J, Adams B, Kaiser P, Meyer DM, Jessen ME, Wait MA, Drazner MH, Ring WS, DiMaio JM: Utility of basiliximab induction at mid-term follow-up. J Heart Lung Transplant 27(2S):S229-230, 2008 [Abstract 471].
142. May T, Aguirre MA, Jessen ME, Satyanarayana N, Greilich PE: Epsilon-aminocaproic acid ( $\epsilon$ ACA), but not aprotinin, increases myocardial ischemic injury in patients undergoing primary coronary artery bypass (CABG) surgery. Society of Cardiovascular Anesthesiologists 13<sup>th</sup> Annual Update on Cardiopulmonary Bypass, Whistler, BC, Canada. March 9-14, 2008.
143. Warner HE, Huser C, Peterson TS, Cobert M, Jessen ME: Heart pumping in the donor OR – A seamless operation. NATCO 33<sup>rd</sup> Annual Meeting, Boston MA, August 11-14, 2008.
144. Greilich PE, Satyanarayana N, Brilakis E, Leonard D, Jessen ME: Epsilon-aminocaproic acid, but not aprotinin, increases cardiac enzyme levels following CABG surgery. Anesthesiology 109:A1620, 2008.
145. Cobert ML, Peltz M, West LM, Jessen ME: Importance of the organ preservation solution composition in reducing myocardial edema during machine perfusion for heart transplantation. J Surg Res 151:175, 2009 [Abstract 7].
146. Peltz M, Bennett LB, Jessen ME, Meyer DM: HLA Mismatches influence lung transplant recipient survival, bronchiolitis obliterans, and rejection – Implications for donor lung allocation. J Heart Lung Transplant 28:S68-9, 2009 [Abstract 11].
147. Cobert M, Peltz M, West L, Jessen ME: Maintenance of human heart oxidative metabolism after 12 hour perfusion preservation. J Heart Lung Transplant 28:S126-7, 2009 [Abstract 174].
148. Parikh SV, de Lemos JA, Jessen M, Brilakis E, Chen AY, Wang T, Roe M, Holper E. Timing of in-hospital coronary artery bypass graft in relationship to mortality for acute coronary syndrome patients: Results from the NCDR ACTION Registry. J Am Coll Cardiol 53 (suppl 1):A334-335, 2009.
149. Peltz M, Cobert ML, Merritt ME, West LM, Jessen ME : Proton spectroscopy techniques to examine myocardial metabolic state in human hearts preserved for

transplantation. In: *Proceedings of the 17th Scientific Meeting of the International Society for Magnetic Resonance in Medicine*; April 18-24, 2009, [Abstract 1781].

150. Cobert ML, West LM, Jessen ME, Peltz M: Differences in regional myocardial perfusion, metabolism, MVO<sub>2</sub> and edema after 12 hour coronary sinus machine perfusion preservation of canine hearts. *ASAIO J* 56(2):101, 2010.

151. Huang N, Steiner ME, Boyd J, Jessen ME, Key N, Levy J, Dellaria SM, Faraday N, Greilich PE: Designing an interventional trial in cardiac surgery patients with excessive bleeding after conventional blood transfusion therapy: A feasibility study. Society of Cardiovascular Anesthesiologists 15<sup>th</sup> Annual Update on Cardiopulmonary Bypass, Whistler, BC, Canada. March 21-26, 2010

152. Cobert ML, Peltz M, Merritt ME, West LM, Ammann L, Jessen ME : Magic angle spinning MRS for identifying biomarkers of perfusion preservation of human hearts after 12 hour storage. In: *2010 Scientific Meeting Proceedings of the ISMRM – ESMRMB Annual Meeting*; May 1-10, 2010 [Abstract 1310].

153. Knowles M, Murphy EH, DiMaio JM, Modrall JG, Timaran CH, Jessen ME, Arko FR: Thoracic endovascular repair for aortic syndromes: An indication and anatomic based analysis. Spring Meeting of the Peripheral Vascular Surgery Society, Boston, MA, June 11-12, 2010 [Abstract PVSS20].

154. Greilich PE, Jessen ME, Boyd JD, Key NS, Levy JH, Faraday N, Steiner ME: Can high-quality interventional trials be performed in cardiac surgery patients with excessive bleeding despite conventional blood transfusion therapy? *Circulation* 122 (suppl):A124, 2010.

155. Murphy EH, Stanley GA, Ilves M, Knowles M, DiMaio JM, Jessen ME, Arko FR: Thoracic endovascular repair (TEVAR) in the management of aortic arch pathology. 21<sup>st</sup> Annual Winter Meeting of the Peripheral Vascular Surgery Society, Steamboat Springs, CO, January 28-30, 2011 [Abstract 17].

156. Cobert ML, Peltz M, West LM, Merritt ME, Jessen ME: Glucose is a poor substrate for preservation of machine perfused donor hearts. *J Surg Res* 165:191-2, 2011 [abstract 15.7].

157. Khan Z, Knowles M, Murphy E, Jessen ME, DiMaio JM, Arko F: Hybrid Thoracic Aortic Repair: A Single Center Experience. Society for Clinical Vascular Surgery 39<sup>th</sup> Annual Symposium, Orlando, FL. March 16-19, 2011 [Abstract P19].

158. Khan Z, Knowles M, Murphy E, Jessen ME, DiMaio JM, Arko F: Endovascular Repair of Symptomatic Penetrating Atherosclerotic Ulcer (PAU) of the Thoracic Aorta. Society for Clinical Vascular Surgery 39<sup>th</sup> Annual Symposium, Orlando, FL. March 16-19, 2011 [Abstract P29].

159. Guel DA, Khera A, Peltz M, McIntire DD, Peshock RM, Jessen ME: Determinants of ascending aortic dimensions in a multi-ethnic population: The Dallas Heart Study. Joint Conference - Nutrition, Physical Activity and Metabolism / Cardiovascular Disease Epidemiology and Prevention (AHA EPI-NAM) 2011 Scientific Sessions, Atlanta, GA, March 22-25, 2011 [Abstract 559],
160. Cobert ML, West LM, Jessen ME, Peltz M: Retrograde coronary sinus perfusion: An alternate approach for machine perfusion preservation of donor hearts for transplantation. J Heart Lung Transplant 30(4S):S198, 2011 [Abstract 591].
161. Master R, Ahmad I, Willis B, Peltz M, DiMaio M, Jessen M, Brilakis ES, Banerjee S: Influence of chronic total occlusions on coronary bypass surgical outcomes. Cardiovascular Revascularization Medicine 12:e37, 2011.
162. Nelson JD, Mikhael PM, Wait MA, Jessen ME, Meyer DM: Impact of mitral valve repair in end-stage congestive heart failure. 2011 Mitral Enclave, New York, NY, May 5-6, 2011.
163. Peltz M, Cobert ML, Merritt ME, West LM, Jessen ME: Metabolic characteristics of human hearts preserved for 12 hours by static storage, antegrade perfusion or retrograde coronary sinus perfusion. 91<sup>st</sup> Annual Meeting of the American Association for Thoracic Surgery, Philadelphia, PA, May 7-11,2011.
164. Cobert ML, Peltz M, Merritt ME, West LM, Jessen ME: Pyruvate is superior to glucose in supporting metabolism of machine perfused donor hearts for transplantation. In: *Proceedings of the 19th Scientific Meeting of the International Society for Magnetic Resonance in Medicine*; Montreal, Canada, May 7-13, 2011, [Abstract 220].
165. Cobert ML, Peltz M, West LM, Merritt ME, Jessen ME: Influence of the perfusion technique on performance characteristics of a machine perfusion device for long-term preservation of human hearts. Biomedical Engineering Society (BMES) 2011 Annual Meeting, Hartford, CT, October 12-15, 2011.
166. Cobert ML, Peltz M, West LM, Merritt ME, Jessen ME: Effects of acetate on myocardial metabolism during hypothermic machine perfusion preservation. J Surg Res 172:346, 2012 [Abstract 56.12].
167. Guel DA, Peltz M, Khera A, McIntire DD, Peshock RM, Jessen ME: Determinants of descending aortic dimensions in a multi-ethnic population: The Dallas Heart Study. Joint Conference - Nutrition, Physical Activity and Metabolism / Cardiovascular Disease Epidemiology and Prevention (AHA-EPI/NAM) 2012 Scientific Sessions, San Diego , CA, March 13-16, 2012 [Abstract P399]. Circulation 125: AP249, 2012
168. Guel DA, Khera A, Peltz M, McIntire DD, Peshock RM, Jessen ME: Changes in diameter of the descending thoracic aorta with age: Implications for thoracic

endovascular aneurysm repair. Aortic Symposium 2012, New York, NY, April 26-27, 2012 [Abstract 11] – plenary citation abstract.

169. Cobert ML, Peltz M, Merritt ME, West LM, Jessen ME: Anaplerotic substrate replenishes tricarboxylic acid cycle intermediates during machine perfusion preservation of donor hearts. J Heart Lung Transplant 31(4S):S149, 2012 [Abstract 420].

170. Greilich PG, Phelps E, Meyer DM, Ring WS, Dupre T, Lee F, Schlegel L, Bailey R, Kimmons M, Hasnain B, Stone S, Philip C, Leach S, Jessen ME: Reducing Deep Sternal Wound Infections (DSWI). UT System Clinical Safety and Effectiveness Annual Conference - Building the Bridge: Maintaining Quality in the Face of Change, San Antonio TX, September 19-21, 2012.

171. Teeter W, Smithson C, Hansen C, Ayers C, Hirsch B, Dobrilovic N, Jessen ME, Meyer DM, Peltz M, Wait MA, DiMaio JM. CAPE: A simple model for predicting operative mortality in endocarditis. Presented at the Southern Thoracic Surgical Association 59<sup>th</sup> Annual Meeting, Naples, FL, November 7-10, 2012

172. Bakaeen FG, Chu D, Kelly RF, Ward HB, Chen G, Petersen NJ, Jessen ME, Holman WL: Off-Pump coronary artery bypass grafting is associated with worse long-term survival. Presented at the Society of Thoracic Surgeons 49th Annual Meeting, Los Angeles, CA, January 27-29, 2013.

173. Bakaeen FG, Chu D, Kelly RF, Ward HB, Chen G, Petersen NJ, Jessen ME, Holman WL: Perioperative outcomes after on-pump versus off-pump coronary artery bypass grafting: A propensity-matching analysis. J Surg Res 179:185, 2013 [abstract 1.6].

174. Cobert ML, Brant S, West LM, Jessen ME, Peltz M: Retrograde machine perfusion for long-term preservation of canine hearts. J Heart Lung Transplant 32(4 supplement): S155-6, 2013 [Abstract 408].

175. DiMaio JM, Morse M, Teeter WA, Cobert ML, West LM, Jessen ME, Peltz M: Donor hearts not offered or rejected for transplantation - A lost opportunity? J Heart Lung Transplant 32(4 supplement): S156, 2013 [Abstract 409].

176. Brant S, Cobert ML, West LM, Jessen ME, Peltz M: Characterizing the agonal phase of the non-heart beating donor in canines - Implications for utilization of DCD hearts for transplantation. J Heart Lung Transplant 32(4 supplement): S158, 2013 [Abstract 415].

177. Peltz M, Brant S, Cobert M, West L, Jessen M: Continuous Coronary Sinus Perfusion for Recovery of Hearts from Non-Heart-Beating Donors. Am J Transplant 13(S5):452, 2013 [Abstract C1428].

178. Kotsia AP, Michael TT, Rangan BV, DiMaio M, Peltz M, Roesle M, Jessen M, Willis B, Michalis LK, Papafaklis MI, Fotiadis DI, Hastings J, Grodin JM, Abdullah SA, Banerjee S, Brilakis ES. Evaluation of aortocoronary saphenous vein graft disease using serial intravascular ultrasound imaging. Insights from the Cardiac CAtheterization for Bypass Graft Patency Rate Optimization (CABG-PRO) study. JACC 62(18 - Suppl 1): B199, 2013 [Abstract TCT-655].
179. Cobert ML, Brant S, West LM, Jessen ME, Peltz M: Successful transplantation in canines after long-term coronary sinus machine perfusion preservation of donor hearts. Circulation 128:A10125, 2013 [Abstract 10125].
180. Brant SM, Cobert ML, West LM, Jessen ME, Peltz M: Successful heart transplantation after machine perfusion preservation in a canine donation after cardiac death (DCD) model. Presented at the 50<sup>th</sup> Annual Meeting of the Society of Thoracic Surgeons, Orlando, FL, Jan 25-29, 2014.
181. Brant SM, Cobert ML, West LM, Holmes C, Jessen ME, Peltz M: Metformin reduces fatty acid oxidation in the isolated perfused rat heart. J Surg Res, 186(2):494, 2014 [Abstract 1.17].
182. Bethea BT, Gualano SK, Kumbhani DJ, Piepenbrok KE, Hastings JL, Banerjee S, Jessen ME: The Centers for Medicare and Medicaid Services (CMS) Requirements for Transcatheter Aortic Valve Replacement (TAVR): Patient Safety or Exclusivity? Presented at the 22<sup>nd</sup> Annual Meeting of the Asian Society for Cardiovascular and Thoracic Surgery (ASCVTS) and the 7<sup>th</sup> AATS/ASCVTS Postgraduate Course, April 3-6, 2014, Istanbul, Turkey.
183. Kotsia AP, Tesfaldet M, Rangan B, Papyannis A, DiMaio M, Peltz M, Roesle M, Jessen M, Willis B, Christopoulos G, Hastings J, Grodin J, Abdullah SA, Banerjee S, Brilakis ES. Serial optical coherence tomography imaging for the evaluation of aortocoronary saphenous vein graft disease. Insights from the Cardiac CAtheterization for Bypass Graft Patency Rate Optimization (CABG-PRO) Study. JACC: 63(12 supplement):A1781, 2014.
184. Brant SM, Holmes C, West LM, Cobert ML, Jessen ME, Peltz M: Influence of oxidative and anaplerotic substrates on myocardial metabolism during hypothermic machine perfusion. J Heart Lung Transplant 33(4 supplement):S259, 2014 [Abstract 703].
185. Sebastian VA, Guleserian KJ, Forbess JM, Jessen ME: Transvenous laser assisted extraction of pacing leads in pediatric and complex congenital heart disease. Presented at the ASAIO 60<sup>th</sup> Annual Conference, Washington DC June 18-21, 2014 [http://journals.lww.com/asaiojournal/Documents/MAT\\_ABSTRACTS\(3\).pdf](http://journals.lww.com/asaiojournal/Documents/MAT_ABSTRACTS(3).pdf), page 90, [abstract 103].



186. Kotsia A, Papafaklis M, Michael T, Rangan B, Peltz M, Roesle M, Jessen M, Willis B, Christopoulos G, Nakas G, Giannitsi S, Sioros S, Argyropoulos K, Fotiadis D, Michalis L, Banerjee S, Brilakis E: Effect of endothelial shear stress on the serial changes of vein grafts assessed by optical coherence tomography during the first year after coronary artery bypass graft surgery: Circulation 130:A13969, 2014 [Abstract 13969].
187. Holmes C, Powell L, Peltz M, Jessen M. Influence of fatty acids, acetate, and ketones on myocardial substrate selection and TCA Cycle intermediates during hypothermic machine perfusion of donor hearts. J Heart Lung Transplant 35(4 supplement):S178-179, 2016 [Abstract 468].
188. Holmes C, Powell L, Clarke N, Jessen ME, Peltz M. Metformin alters myocardial substrate selection during normokalemia and potassium cardioplegia. Presented at the 11<sup>th</sup> Annual Academic Surgical Congress, Jacksonville, FL, February 2-4, 2016 [Abstract 24.09].
189. Price J, Williams D, Murthy R, Waters J, Ring W, Jessen ME, Peltz M, Wait M. Does lung implantation by a resident affect short-term outcomes? Presented at the 11<sup>th</sup> Annual Academic Surgical Congress, Jacksonville, FL, February 2-4, 2016 [Abstract 62.05].
190. Nawalaniec J, et. al.: Robotic Surgery for Anatomic Lung Resection is a Cost-Effective and Oncologically-Sound Alternative to Thoracotomy and Video-Assisted Thoracic Surgery (VATS) When Performed by an Experienced Robotic Surgeon. American College of Surgeons' 2017 Clinical Congress, San Diego, CA October 22-26

## **MISCELLANEOUS MATERIAL**

1. Abd-Elfattah AS, Jessen ME, Hanan SA, Tuchy G, Wechsler AS: ATP derangement versus free-radical-mediated injury [Reply] Circulation 84:2207-8, 1991.
2. Meyer DM, Jessen ME: Exploring the depth of knowledge with the Annals of Thoracic Surgery [Image] Ann Thorac Surg 68:268, 1999.
3. Jessen ME: Opening of mitochondrial ATP sensitive potassium channels enhances cardioplegic protection [Invited Commentary] Ann Thorac Surg 71:1288-9, 2001.
4. Jessen ME: Glucose control during cardiac surgery: How sweet it is. [Editorial] J Thorac Cardiovasc Surg 125:985-7, 2003.
5. Jessen ME: Pro: Heparin-coated circuits should be used for cardiopulmonary bypass. [Editorial] Anesth Analg 103:1365-9,2006.

6. Jessen ME: Neutrophil elastase inhibitor, Sivelestat, attenuates acute lung injury after cardiopulmonary bypass in the rabbit endotoxemia model [Invited Commentary] Ann Thorac Surg 83:160, 2007.
7. Jessen ME: Attenuated renal and intestinal injury after use of a mini-cardiopulmonary bypass system [Invited Commentary] Ann Thorac Surg 83:1766-7, 2007.
8. Jessen ME: Comparison of blood activation in the wound, active vent and cardiopulmonary bypass circuit [Invited Commentary] Ann Thorac Surg 86:541-2, 2008.
9. Rogers NA, Nguyen L, Minniefield NE, Jessen ME, de Lemos JA: Fracture and embolization of an inferior vena cava filter strut leading to cardiac tamponade [Image] Circulation 119:2535-6, 2009.
10. Jessen, ME: 30-Day in-vivo performance of a wearable artificial pump-lung for ambulatory respiratory support [Invited Commentary] Ann Thorac Surg 93:281, 2012.
11. Jessen ME: Major bleeding, transfusions, and anemia: The deadly triad of cardiac surgery [Invited Commentary] Ann Thorac Surg 96:485, 2013.
12. Jessen ME: Impact of peri-operative acute kidney injury as a severity index for 30-day readmission after cardiac surgery [Invited Commentary] Ann Thorac Surg 97:117, 2014.
13. Jessen ME: Comparison of graft patency between off-pump and on-pump coronary artery bypass grafting: an updated meta-analysis. [Invited Commentary] Ann Thorac Surg 97:1341-2, 2014.
14. Jessen ME: Influence of Diabetes Mellitus on Long-term Clinical and Economic Outcomes after Coronary Artery Bypass Grafting [Invited Commentary] Ann Thorac Surg 97:2079-80, 2014.
15. Jessen ME: Efforts to improve bypass graft patency have not been "in vein". J Thorac Cardiovasc Surg 150:889-90, 2015.

## **PRESENTATIONS**

Hemodynamic sequelae following carotid endarterectomy. Presented at the American College of Surgeons Meeting - Manitoba Chapter (Region IX), December, 1983

Breast biopsy for mammographic lesions. Presented at the American College of Surgeons Meeting - Manitoba Chapter (Region IX), December, 1984

Prognostic factors for survival in congenital (Bochdalek) diaphragmatic hernia. Presented at the American College of Surgeons Meeting - Manitoba Chapter (Region IX), December, 1985

Evaluating Function and Metabolism after Ischemia in Neonatal Myocardium. Presented at the Spring Cardiovascular Symposium, Duke University Medical Center, Durham, NC, April, 1987

Sensitivity of Neonatal Myocardium to Ischemia: Confusion from Failure to Control the Bathing Media During Ischemia. Presented at the Forum Session of the Clinical Congress of the American College of Surgeons, San Francisco, CA, October, 1987

Oxygen Consumption in the Empty-Beating, Fibrillating, and Potassium-Chloride Arrested Neonatal Heart. Presented at the Spring Cardiovascular Symposium, Duke University Medical Center, Durham, NC, April, 1988

Oxygen Consumption in the Empty-Beating, Fibrillating, and Potassium-Chloride Arrested Neonatal Heart. Presented at the Forum Session of the Clinical Congress of the American College of Surgeons, Chicago, IL, October, 1988

Patterns of substrate oxidation in reperfused myocardium: a  $^{13}\text{C}$  NMR study. Presented at the 65th Scientific Sessions of the American Heart Association, New Orleans, LA, November, 1992

$^{13}\text{C}$  Isotopomer analysis: A technique for analysis of intermediary metabolism in ischemic reperfused heart tissue. Presented at the 2nd International Symposium on Heart Failure, Geneva, Switzerland, May, 1993

Acetate and lactate oxidation in the perfused failing human heart. Presented at the 12th Annual Meeting of the Society of Magnetic Resonance in Medicine, New York, NY, August, 1993.

Platelet and neutrophil deposition on membrane oxygenator circuits studied by noninvasive dual isotope scintigraphy. Presented at the ASAIO Cardiovascular Science and Technology Conference, Washington DC, December 9-11, 1994.

Effects of pyruvate on pyruvate carboxylation and substrate selection in the heart. Presented at the 3rd Meeting of the Society of Magnetic Resonance, Nice, France, August, 1995.

Teleconference and Panel Discussion on Myocardial Protection. Live telecast from Zale Lipshy University Hospital to the 16th Annual San Diego Cardiothoracic Surgery Symposium, San Diego, CA, March 1, 1996.

Increasing anaplerosis improves cardiac function after ischemia. Presented at the 4th Scientific Meeting of the International Society for Magnetic Resonance in Medicine, New York, NY, April, 1996.

Metabolic effects of cardioplegia. Presented at the 35th International Conference of the American Society of Extracorporeal Technology, Phoenix, AZ, April 5, 1997.

Metabolic effects of secondary cardioplegia. Presented at the 31st Annual Meeting of the Association for Academic Surgery, Dallas, TX, November 7, 1997.

Secondary cardioplegia suppresses fatty acid oxidation and improves post-ischemic ventricular function. Presented at the 6th Scientific Meeting of the International Society of Magnetic Resonance in Medicine, Sydney, Australia, April, 1998.

Potassium cardioplegia suppresses neonatal myocardial fatty acid metabolism. Presented at the 6th Scientific Meeting of the International Society of Magnetic Resonance in Medicine, Sydney, Australia, April, 1998.

Measurement of oxygen consumption in lung tissue by  $^{13}\text{C}$  NMR. Presented at the 8<sup>th</sup> Scientific Meeting of the International Society for Magnetic Resonance in Medicine, Denver, CO, April, 2000.

Monitoring in cardiac surgery. Keynote Address at the Annual Meeting of the Texas Association of Nurse Anesthetists, Galveston, TX, August 25, 2000.

Goal-directed Therapy - the Dallas Experience. Presented at "Optimal Care of the Higher Risk Surgical Patient", San Francisco, CA, October 19, 2000.

Esophageal Doppler monitoring during cardiac surgery. Presented at Surgical Grand Rounds, Duke University Medical Center, Durham, NC, November 8, 2000.

Aortic Jeopardy. Presented at Surgical Grand Rounds, Maimonides Medical Center, Brooklyn, NY, June 28, 2001.

Acute Aortic Syndromes. Presented at UT Southwestern Vascular and Endovascular Symposium, Dallas, TX, May 24, 2002.

New Concepts in Myocardial Preservation. Presented at the Symposium on Current Techniques and Trends in Cardiovascular Surgery and Perfusion, Dallas, TX, October 20, 2002.

Sangrado en Cirugia Cardiaca: Estrategia de prevencion y manejo (Bleeding after cardiac surgery: Strategies for management and prevention); Tecnicas de proteccion miocardica en cirugia cardiaca (Techniques of myocardial protection in cardiac surgery); Transplante de corazone (Cardiac transplantation); and Sindromes aotico agudos

(Acute aortic syndromes). Presented at the International Meeting of Cardiology and Cardiovascular Surgery, Quito, Ecuador, November 6-8, 2002.

Aortic Dissection and its Variants. Presented at Surgical Grand Rounds, Maricopa Medical Center, Phoenix, AZ, December 4, 2002.

Use of the Radial Artery in Coronary Artery Bypass. Presented at the Symposium on New Perspectives on Radial Artery Harvesting, Dallas, TX, December 9, 2002.

Potential Uses of Nesiritide in Cardiac Surgery. Presented at Wichita Falls, TX, September 30, 2003.

Perioperative Hypertension in Cardiac Surgery. Presented at Cardiology/CT Surgery Grand Rounds, University of Arkansas for Medical Sciences, Little Rock, AK, August 11, 2004.

Limit entre la reparacion y el reemplazo de valvula mitral (Limits of mitral valve repair and replacement); El futuro de la cirugia coronario en la era de los stents medicados (The future of coronary surgery in the era of drug-eluting stents). Presented at the XXXII Jornadas Internacionales de Cardiologia, Quito, Ecuador October 24-28, 2004.

Vasoactive Therapy in Critically Ill Patients. Presented at Cardiology/CT Surgery Grand Rounds, Arizona Heart Institute, Phoenix, AZ, June 16, 2005.

Coronary Off-Pump Debate: Con. Presented at the 42<sup>nd</sup> Annual Meeting of the Society of Thoracic Surgeons, Chicago, IL, January 31, 2006.

Magnetic Resonance Spectroscopy for Evaluating Cardiac Metabolism. Presented at the Cardiac Surgery Biology Club, Philadelphia, PA, April 29, 2006.

Bleeding After Cardiac Surgery: A Comparison of Anti-Fibrinolytic Strategies. Presented at the Perfusion at Sea Conference, Galveston, TX, June 16-18, 2006.

I Can't Place the LV Lead on the Lateral Wall: What Are My Options? Presented at Heart Rhythm 2007 – 28<sup>th</sup> Annual Scientific Sessions of the Heart Rhythm Society, Denver, CO, May 9, 2007.

Current Status of Off-Pump Coronary Artery Bypass Grafting. Presented at the 2007 Kendall Cardiovascular Symposium, Miami Beach, FL, May 22-23, 2007.

Novel Anti-Hypertensive Strategies in the ICU. Presented at the 8<sup>th</sup> Annual New Cardiovascular Horizons Meeting, New Orleans, LA, September 8, 2007.

Surgical Revascularization for Chronic Ischemic Heart Disease. Presented at the 2010 Scientific Sessions of the American Heart Association, Chicago, IL, November 17, 2010.

Spinal Cord Protection During Thoracic Aortic Surgery; Management of Complications of Cardiac Transplantation. Presented at the 23<sup>rd</sup> Annual Conference of the Saudi Heart Association, Riyadh, Saudi Arabia, January 27-30, 2012.

CABG: When is Cold Steel the Best Deal? Presented at ACC.12, the 61<sup>st</sup> Annual Scientific Session and Expo of the American College of Cardiology, Chicago, IL, March 24-27, 2012.

Assuming Administrative Responsibilities. Presented at the 2012 American Association for Thoracic Surgery Leadership Academy, San Francisco, CA, April 27, 2012.

Qué hay de nuevo en los Lineamientos de 2011 (Guidelines) de Cirugía de Revascularización Coronaria? (What's New in the 2011 CABG Guidelines); Nuevas Estrategias de Protección del Corazón Donante en Transplante (New Strategies for Protecting the Donor Heart for Transplantation) Presented at Trascendiendo Fronteras en Cardiología, Enfermedad Cardiovascular Y Cerebrovascular, Quito, Ecuador May 6-9, 2012.

Could a heart donated in Dallas be transplanted in Guangzhou? Research on long-term organ preservation. Joint Forum and Workshop: The First Affiliated Hospital, Sun Yat-sen University and UT Southwestern Medical Center. Guangzhou, China, October 18-19, 2012.

Review of Revascularization Guidelines. Dallas Cardiovascular Innovations 2012, Dallas, TX, December 8, 2012.

Progress in machine perfusion to preserve donor hearts for transplantation. 2013 IEEE EMB Medical Device Symposium, Dallas, TX, November 7, 2013.

Revascularization Guideline Update: Review of Perioperative Guidelines. Dallas Cardiovascular Innovations 2013, Dallas TX, January 18, 2014.

TAVR in 2015. Dallas Cardiovascular Innovations 2015, Dallas TX, January 18, 2015.

Coronary Artery Bypass Grafting in 2016. Dallas Cardiovascular Innovations 2016, Dallas TX, January 16, 2016.

Mechanical Circulatory Support Following STEMI. Texas Health Dallas STEMI Conference, Dallas TX, April 16, 2016.

## **FILMS**

Lowé JE, Jessen ME: Resection and Repair of Giant Left Ventricular Aneurysm. Presented at the Spectacular Problems in Surgery Film Session of the 75<sup>th</sup> Clinical Congress of the American College of Surgeons, Atlanta, GA, October, 1989.