

**John D. Puskas, M.D. MSc**  
**Curriculum Vitae, updated 8/2008**

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U.S. Citizen, naturalized

**Current Titles and Affiliations:**

*Academic Appointments:*

*Primary appointments:*

Professor of Surgery  
Chief of Cardiac Surgery, Emory Crawford Long Hospital, July 2005

*Joint and secondary appointments:*

Associate Chief, Division of Cardiothoracic Surgery, January 2005

*Clinical appointments:*

Staff surgeon, Crawford Long Hospital, July 1996  
Staff surgeon, Emory University Hospital, July 1996

*Administrative appointments:*

Surgical Director, Emory Carlyle Fraser Center for Atrial Fibrillation  
Director, Clinical Research Unit, Division of Cardiothoracic Surgery  
Professor of Surgery  
Associate Chief, Division of Cardiothoracic Surgery  
Director of Cardiothoracic Surgical Intensive Care Unit, Emory Crawford  
Long Hospital

**Licensure/Boards:**

Georgia Medical Board – License No. 038072

**Specialty Boards:**

American Board of Surgery  
#39454 September 1994  
Recertified 2004

American Board of Thoracic Surgery; #5997 June 1997. Recertified 2007

**Education:**

1974-1978 Diploma; Upper Canada College, Grade 13 Honors  
1978-1982 A.B. Degree; Biology, Summa Cum Laude, Princeton University  
1982-1986 Medical Degree; Harvard Medical School

1989-1991 Master of Science; Surgical Science, University of Toronto

**Postgraduate Training:**

Harvard University  
General Surgery Residency Program  
Under Gerald Austen, MD  
July 1986-June 1993

University of Toronto  
Research fellowship, Division of Thoracic Surgery  
Toronto General Hospital  
Under G. Alexander Patterson, MD  
July 1989-March 1991

Massachusetts General Hospital  
General Thoracic Surgery (six month elective)  
Under Hermes C. Grillo, MD  
July 1993-December 1993

Emory University  
Residency and Fellowship in cardiothoracic Surgery  
Under Robert A. Guyton, MD  
July 1993-June 1996

**Committee Memberships:**

*National and International*

Society of Thoracic Surgeons  
Chair, Tech Con Program Committee 2006-2007  
Program Committee, 2003-4, 2004-5  
Committee on New Technologies, 1999-2002  
American Association for Thoracic Surgery  
Council Member 2007-2011  
Program Committee Reviewer 2003-4  
Program Committee Member 2004-5  
Tech-Con Program Committee, 2005  
Education Committee, 2004-present

International Society for Minimally Invasive Cardiac Surgery  
President 2008-2009  
President – Elect 2007-2008  
Vice-President 2006-2007  
Program Committee Member 2001-2003  
Chair Program Committee 2004  
Chair Publications Committee 2003-2008;  
Chair, Consensus Conference Committee 2004.

American Board of Thoracic Surgery  
Member, ABTS In-Training Examination Committee, 2004

Thoracic Surgery Foundation for Research and Education:  
Member, TSFRE Education Committee, 2004  
NHLBI Working Group on Future Directions in Cardiac Surgery, May, 2004

*Institutional*

U.S. Surgical Endosurgery Executive Committee, 1999-Present  
Cardiothoracic OR Committee, 2002-Present.  
Emory Healthcare Reorganization Committee, chaired by John Fox, Fall 2002  
Emory University Conflict of Interest Committee, 2003-2004  
Emory Crawford Long Hospital Medical Advisory Committee, Chaired by John Fox,  
CEO, Emory Healthcare., 2004-present  
Woodruff Leadership Academy, Chaired by Michael Johns CEO of Woodruff Health  
Sciences Center, 2004  
Emory Heart Center Steering Committee, chaired by Douglas Morris.  
Emory Heart Center Steering Committee, Subcommittee on Practice Models,  
Chaired by David Vega and Angel Leon.  
Emory Heart & Vascular Center, Member, Board of Directors 2007-present  
Carlyle Fraser Heart Center, Advisory Board Member, 2005-present

**Consultantships:**

Quest Medical 2000-2006  
Medtronic (OPCAB proctor/consultant) 1999-present  
Medtronic (Development of Controlled Intermittent Asystole) 2003-2007  
Novare Surgical 2003  
St Jude Medical 2002-November 2003.  
U.S. Surgical, Surgeon Advisory Board (disbanded after Tyco purchase) 1996-1998  
Guidant/Boston Scientific Cardiac Surgery Strategy Board 2006- present

**Manuscript reviewer:**

Annals of Thoracic Surgery  
Journal of Thoracic and Cardiovascular Surgery  
Heart Surgery Forum  
The Lancet  
The Journal of Cardiac Surgery  
Circulation  
Innovations

**Honors and Awards:**

Senior Thesis Book Prize, Princeton University  
Sigma Xi Honor Society, Princeton Chapter, 1982

E. D. Churchill Fellowship, Department of Surgery  
Massachusetts General Hospital, 1989-91

Educational Award; Society of Thoracic Surgeons, to attend the Harvard School of Public Health/J.F. Kennedy School of Government Executive Course in “Skills For The New World Of Health Care”, April 26 – May 4, 2003.

Award for Best Oral Presentation, International Society for Minimally Invasive Cardiothoracic Surgery, Annual Meeting, June 23-26, 2004, London, England

J. Maxwell Chamberlain Memorial Award (best paper in adult cardiac surgery) Society of Thoracic Surgeons Annual Meeting, January 2007, San Diego, CA

Network for Cardiothoracic Surgical Investigations in Cardiovascular Medicine, Emory University School of Medicine, September, 2007

**Society Memberships:**

- Society of Thoracic Surgeons
- American Association for Thoracic Surgery
- MGH Surgical Alumni Society
- American College of Surgeons
- International Society for Minimally Invasive Cardiac Surgery (ISMICS)
- American College of Chest Physicians
- Society of University Surgeons

**Research Focus:** The application of evidence-based medicine to cardiothoracic surgical practice, especially in the development of new techniques and technologies for innovative procedures. We have performed one of the earliest trials of endoscopic harvest techniques for saphenectomy and published the landmark US trial of off-pump coronary artery bypass surgery. We are presently the national/international PI site for two multi-center FDA-sponsored trials, one evaluating the safety of lower anticoagulation after prosthetic valve replacement (ON-X valve), the other testing the safety and efficacy of a novel anastomotic connector device (PasPort Trial). Since January, 2005, we have built the infrastructure and staff (now 11 FTEs) for the Emory Cardiothoracic Clinical Research Unit (CRU), which is devoted to conducting rigorous clinical trials to inform evidence-based practice in cardiothoracic surgery. In cooperation with the Emory Cardiothoracic Research Laboratory and the new Emory Center for Device Innovation (CDI), the CRU also seeks to translate advances in basic science and device innovation to clinical cardiothoracic practice. The CRU has recently been awarded a NIH UO1 Network grant in support of multicenter pre-operative clinical research in adult cardiac surgery.

**Grant Support:**

**Current Research Support**

Award # ROME	2003-2007
Agency: Medical Carbon Research Institute	
Reduced On-X Morbid Events (ROME) Trial, (MCRI, LLC)	

The purpose of this investigation is to assess the safety and efficacy of the On-X<sup>®</sup> Prosthetic Heart Valve when used to replace diseased aortic and mitral valves in patients in the United States of America (USA). This multi-center (20 centers) investigation will follow patients for five years from the date of implant of the On-X valve.

Role: Co-Investigator

Award # EPIC 2003-2007

Agency: St. Jude Medical

An Observational, Prospective Evaluation of the SJM Epic Valve

This is a multi-centered, international, prospective, non-randomized, observational study to confirm the safety and efficacy of the Epic valve. Target enrollment is 300 patients and will consist of patients requiring replacement of their native or mechanical mitral or aortic heart valve.

Role: Principal Investigator

Award # Heartstring 05/2006- 05/2007

Agency: Cardiothoracic Systems, Inc.

Guidant Heartstring Aortic Cutter Evaluation

This is a single center study to evaluate the size and quality of aortotomies created by the Heartstring aortic cutter compared to those created using a standard aortic punch. Target enrollment is 10 patients.

Role: Principal Investigator

Award # On-X Valve 05/2006-05/2008

Agency: Medical Carbon Research Institute, LLC

Clinical trial of the ON-Xvalve using low dose anticoagulation

This is an international, prospective, randomized, FDA-sponsored, multicenter trial comparing the safety and efficacy of low dose anticoagulation to standard anticoagulation therapy in patients receiving an On-X<sup>®</sup> prosthetic heart valve. It includes a low-risk AVR group which will receive aspirin plus plavix, without coumadin. Target enrollment is 1200 patients having isolated aortic or mitral valve replacement. Duration of follow-up in this trial is 5 years.

Role: International Principal Investigator

Award # TRM-05-001 06/2005-06/2008

Agency: Cardiogenesis Corporation

Prospective Multicenter, Single Arm Study of the Feasibility and Safety of

Thoracoscopic Transmyocardial Revascularization (TTMR) Using the Cardiogenesis Pearl Handpiece Delivery Systems in Patients with Stable, Medically Refractory Severe (Class IV) Angina Who Are Not Candidates for Coronary bypass Surgery (CABG) or Percutaneous Intervention (PCI). This is a prospective, multicenter, single-arm study to assess the feasibility and initial safety of TTMR using the handpiece delivery system. Target enrollment is 80 patients who are eligible for sole TMR therapy.

Role: Principal Investigator

Award # FREEDOM 7/2006 – 7/2011

Agency: Mount Sinai/NERI/NHLBI  
Future Revascularization Evaluation in Patients with Diabetes Mellitus: Optimal Management of Multivessel Disease. This is a multicenter, multinational, two-arm, open label prospective randomized superiority trial of 5 years duration to evaluate whether percutaneous coronary intervention (PCI) with drug-eluting stents is more or less effective than coronary artery bypass surgery (CABG). Target enrollment is 2400 patients with diabetes mellitus and angiographically confirmed multivessel CAD with indication for revascularization. All-cause mortality, nonfatal myocardial infarction and stroke are the primary endpoints.

Role: Principal Investigator

Award # Cardica PasPort 7/2006 – 7/2008

Agency: Cardica, Inc

Study of the PAS-Port® Proximal Anastomosis System in Coronary Bypass Surgery

This study is a prospective, randomized, multicenter, multinational trial to evaluate the safety and effectiveness of the PAS-Port proximal anastomosis system. Target enrollment is 220 patients requiring two aorto-coronary artery venous bypass grafts. Index graft patency will be evaluated at nine months using angiography; adverse event rates will be evaluated longitudinally.

Role: National Principal Investigator

Award # 1 U01 HL088928-01 7/2007-7/2011

Agency: US National Institutes of Health (NHLBI),

The US National Institutes of Health (NHLBI), in cooperation with the Canadian Institute of Health Research, has established a Network of 7 major academic cardiothoracic surgical centers in North America to conduct multicenter clinical trials. In effect, these federal funding agencies have mandated that cardiothoracic surgical practice will become evidence-based, even in controversial areas of clinical practice that have eluded conclusive investigation by single centers in the past. We will be required to actively enroll patients in the prospective, randomized trials that the Network leadership (made up of the PIs of each center and NHLBI representatives) develop.

Role: Principal Investigator

*SMART TRIAL:* 1. Protocol for Longitudinal Follow-up of SMART Trial, \$755,000, funded by Medtronic, Boston Scientific and the Carlyle Fraser Heart Center to perform rigorous follow-up of the patients randomized in 2000-2001 to OPCAB vs. CABG/CPB in the SMART trial, including assessment of graft patency with state-of-the-art multidetector CT angiography, brain MRI, neurocognitive testing etc. patient follow-up underway, 9/2007-9/2008.

Role: Principle Investigator

### **Completed Research Support**

Award # PADCAB

2000-2003

Agency: Quest Medical

Prospective Randomized Evaluation of Perfusion-Assisted Direct Coronary Artery Bypass and Enhanced Perfusion-Assisted Direct Coronary Artery Bypass Using Adenosine as Facilitating Technology for Off-Pump Coronary Artery Bypass Surgery (PADCAB/Enhanced PADCAB). The purpose of this study was to determine whether active perfusion of coronary bypass grafts using perfusion assisted direct coronary artery bypass (PADCAB) and/or enhanced perfusion assisted direct coronary artery bypass (utilizing Adenosine) offers additional benefit over traditional off-pump coronary artery bypass without mechanical perfusion of grafts.

Role: Co-Investigator

Award # MOSAIC 2000-2003

Agency: Medtronic, Inc.

The primary objective of this study was to evaluate the safety, efficacy and clinical performance of the MOSAIC bioprosthesis, which passed FDA pre-clinical evaluation in the Emory cardiothoracic research lab (CTRL).

Role: Co-Investigator.

Award # SMART 2000-2004

Agency: Medtronic

Surgical Management of Arterial Revascularization Therapies (SMART) Trial.

This randomized, controlled trial enrolled 200 elective patients, unselected for cardiac or other comorbidities, between March 2000 and August 2001, to compare outcomes after coronary artery bypass grafting performed with and without the use of cardiopulmonary bypass. Thirty day and 1 year results were published in the Journal of Thoracic and Cardiovascular Surgery and in the Journal of the American Medical Association, respectively.

Role: Principal Investigator

Award # Prevent IV 2003 - 2006

Agency: Corgentech

A Phase III, Multi-Center Randomized, Double-Blind, Placebo-Controlled Trial of the Ex Vivo Treatment with CGT003 of Coronary Vein Grafts in Patients Undergoing Coronary Artery Bypass Graft Procedures (Prevent IV). This was a clinical trial of an investigational treatment, E2F Decoy, a transcription factor, designed to prevent failure of vein grafts post coronary bypass. Primary endpoints were graft patency and MACE one year postoperatively.

Role: Co- Investigator

**Patents:**

**Issued:**

- i) U.S. Patent No. 6,042,538 "Device for Endoscopic Vessel Harvesting"
- ii) U.S. Patent No. 6,479,523 entitled "Pharmacologic Drug Combination in Vagal-Induced Asystole." Licensed to Medtronic.

- iii) U.S. Patent No. 6,429,217 entitled “Pharmacological Drug Combination in Vagal-Induced Asystole.” Licensed to Medtronic.
- iv) U.S. Patent No. 6,778,854 entitled “Methods of Indirectly Stimulating the Vagus nerve with an Electrical Field.” Licensed to Medtronic.
- v) U.S. Patent No. 6,656,960 entitled “Methods of Performing Vagal-Induced systole.” Licensed to Medtronic.
- vi) U.S. Patent No. 7,072,720 entitled “Devices and Methods for Vagus Nerve Stimulation”
- vii) European Patent No. EP1005337 entitled “Pharmacologic Drug Combination in Vagal-Induced Asystole”
- viii) Australian Patent No. 63371/00 entitled “Devices and Methods for Vagus Nerve Stimulation”

**Pending:**

- i) U.S. Patent Application No. 10/051,758 entitled “Apparatus for Indirectly Stimulating the Vagus Nerve with an Electrical Field.” Notice of allowance 3/31/2006.
- ii) U.S. Patent Application No. 10/051,752 entitled “Methods of Indirectly Stimulating the Vagus Nerve with an Electrical Field.”
- iii) U.S. Patent Application No. 10/672,586 entitled “Methods of Indirectly Stimulating the Vagus Nerve with an Electric Field”.

**Clinical Services Contribution:**

Full-time clinical practice of Cardiothoracic Surgery at Crawford Long Hospital; four full OR days each week.

Regular participation in Thoracic transplantation call schedule and performance of heart and lung transplantation, 1996-2006.

Cross-coverage of General Thoracic Surgical service, as required, 1996-2002.

**Formal Teaching:**

**Medical student training:**

- Clinical instruction during medical student rotations
- Clinical instructor in fourth year Surgical Anatomy elective, 1998-2000.
- Mentor, SOM Mentorship Program 2003.

**Graduate Programs:**

*Fellowship Training programs:*

Clinical Instruction and operative training during rotations at Crawford Long Hospital and on Transplantation Service at Emory University Hospital.

*Residency programs:*

Clinical Instruction and operative training during rotations at Crawford Long Hospital and on Transplantation Service at Emory University Hospital

*Nursing Education Programs:*

Invited Speaker: OPCAB with Arterial Grafts: The Future of Coronary Surgery

Emory Cardiovascular Nursing Conference “Setting The Pace 2003”. Emory Conference Center, March 21, 2003.

**Post-Graduate Programs:**

- Ongoing operative instruction and demonstration of off-pump CABG techniques at Crawford Long Hospital for approximately 200 individual visiting surgeons and surgical team members to date, 1999-2008, sponsored by Medtronic.
- Operative instruction, demonstration of off-pump CABG techniques and one-on-one mentoring of attending surgeons at extramural centers, 2002 sponsored by The Society of Thoracic Surgeons.
- Moderator and Faculty Member, industry-sponsored educational symposia on off-pump CABG. Each symposium provides comprehensive teaching in OPCAB to 40-50 surgeons:
  - 1) Orlando, Oct. 2000 – Medtronic Off-Pump 2000 – The State of Coronary Bypass
  - 2) San Bernardino, CA, Jan. 2001 – Medtronic Off-Pump 2001
  - 3) Hilton Head, S.C., June 7-9, 2001 – Medtronic Off-Pump 2001
  - 4) New York City, NY, May 22-24, 2002 – Medtronic Off-Pump 2002
  - 5) Amelia Island, FL, October 2-4, 2003—Medtronic Beating Heart Summit: An Advanced Approach
- Invited Faculty, Edwards Lifesciences, Cardiothoracic Chief Resident Symposium, Costa Mesa, CA, October 12, 2001, “State-of-the Art Off-Pump Surgery”.
- Invited Faculty, St. Jude Medical, Cardiothoracic Chief Resident Symposium, Minneapolis, MN, March 2003; “OPCAB with Arterial Conduits Is The Future”.
- Teaching Presentations at Crawford Long Cardiothoracic Surgery/Cardiology joint rounds approx. every third month. Lecture. “OPCAB: State of the Art”, given to Carlyle Fraser laboratory fellows and visiting students from St. Olaf’s College, January 15, 2003.
- Directed and Moderated an industry-sponsored symposium on off-pump CABG at Crawford Long Hospital for 40 surgeons, anesthesiologists, PA and RNs, including live telesurgeries, interactive education, panel discussions, lectures from Emory/Crawford Long surgical, anesthesia, nursing and PA staff. Off-Pump CABG: A Team Approach, October 23-24, 2003.

**Invitations to National or International Conferences:**

1. University of South Florida, Annual Meetings, Minimally Invasive Total Myocardial Revascularization, Tampa, March 1998, 1999, 2000.
2. Minimally Invasive and Laparoscopic Surgery into the 21<sup>st</sup> Century. Invited Faculty. Brisbane, Australia, August 7, 1998.

3. Latest Techniques in Minimally Invasive Cardiac Surgery. Invited Faculty. Brussels, Belgium, September 19, 1998.
4. A Cardiac Surgery Roundtable “Coronary Artery Bypass Off-Pump Surgical Techniques and Clinical Issues.” Scottsdale, Arizona, August 28, 1999.
5. Latest Techniques in Minimally Invasive Cardiac Surgery. Invited Faculty. Glasgow Scotland, September 9, 1999.
6. Cardiothoracic Techniques and Technologies: Current Trends in Thoracic Surgery VI. Invited Faculty. Bal Harbour, Florida, Jan. 27 – 29, 2000.
7. American College of Cardiology. Invited Faculty. Anaheim, March 12, 2000.
8. Controversies in Off-Pump Coronary Artery Bypass, and Symposium associated with the AATS Annual Meeting, Invited Faculty. Toronto, Canada, May 1, 2000.
9. American College of Surgeons, Plenary Session, Invited Faculty. Chicago, October 23, 2000.
10. Utrecht Workshop in Minimally Invasive Cardiac Surgery, Annual Meeting, Lisbon, Portugal. Moderator, and session chairman. Meeting scheduled September 14-18, 2001; cancelled due to September 11 terrorist attacks.
11. Cardiopulmonary Bypass in the ‘90’s. Invited Faculty. Annual Meetings. Atlanta, Georgia, 1996 – 2001.
12. Fifth Annual New Era Cardiac Care: Innovation & Technology, Invited Faculty, Dana Point, CA, January 4-6, 2002.
13. Seventh Annual Advanced Coronary and Peripheral Interventional Symposium: A Case Review Workshop. Invited Faculty. Vail, CO, January 17-20, 2002.
14. American Society of Echocardiography, 13<sup>th</sup> Annual Scientific Sessions, Invited Speaker, “Intraoperative Echo for OPCAB”, June 11, 2002, Orlando, FL.
15. South Atlantic Cardiovascular Society, Invited faculty and featured speaker. Williamsburg, VA, August 1-4, 2002.
16. Utrecht Workshop in Minimally Invasive Cardiac Surgery, Annual Meeting, Monaco. Invited faculty, moderator, and session chairman. September 19-20, 2002.
17. American Heart Association Annual Meeting, Chicago, November 17, 2002, invited faculty.

18. Society of Cardiac Surgeons, Annual Meeting, Magog (Montreal), Canada. Invited faculty, June 2003.
19. Medtronic Symposium: Advanced Techniques and Technologies in Cardiac Surgery, Invited faculty, Chateau Elan, GA, November 8, 2003.
20. American Heart Association Annual Meeting, Orlando, November 10, 2003. Invited faculty.
21. Northern Exposure 2003 OPCAB Symposium, Invited Keynote Speaker, Trillium Health Care, Mississauga Ontario, November 21, 2003.
22. Society of Thoracic Surgeons 2004 Annual Meeting, Invited Discussant, Plenary Session, San Antonio, January 26, 2004.
23. Society of Thoracic Surgeons 2004 Annual Meeting, Invited Speaker, "How I Do It" Breakfast Session: "Tips and Techniques for Multivessel OPCAB", San Antonio, January 27, 2004.
24. American Association for Thoracic Surgery 2004 Annual Meeting, Invited Speaker, Post-Graduate Course, Toronto, April 26, 2004.
25. 57<sup>th</sup> Annual Meeting of the Japanese Association for Thoracic Surgery, Keynote Speaker, Sapporo, October 20, 2004.
26. International Society for Minimally Invasive Cardiothoracic Surgery, Mid-Winter Meeting, Invited Speaker, Bangkok, Thailand, December 5, 2004.
27. University of Ottawa Heart Institute Grand Rounds. Invited Speaker. Ottawa, Canada. January 5, 2005.
28. 6<sup>th</sup> International Symposium of Redo Cardiac Surgery in Adults. Invited Speaker. San Francisco, California. April 9, 2005.
29. 85<sup>th</sup> Annual Meeting of the American Association for Thoracic Surgery. Invited Speaker, San Francisco, California. April 10, 2005.
30. International Society for Minimally Invasive Cardiothoracic Surgery, Annual Scientific Meeting. Invited Speaker. New York City, New York, June 1, 2005.
31. Off-Pump CABG National Symposium. Invited Speaker. Tokyo, Japan. July 20, 2005.
32. Japanese Association for Coronary Artery Surgery. Keynote Speaker. Tokyo, Japan. July 21, 2005.

33. 14<sup>th</sup> Annual Meeting of the International Society for Cardiothoracic Surgery. Keynote Speaker. Beijing, People's Republic of China. October 15, 2005.
34. 55<sup>th</sup> Annual Scientific Session of the American College of Cardiology. Invited Speaker. March 2, 2006
35. International Society of Minimally Invasive Cardiothoracic Surgery, Annual Scientific Meeting. Invited speaker and moderator. San Francisco. June 7-10, 2006.
36. European Association for Cardiothoracic Surgery Annual Techno-College meeting. Invited speaker and moderator. Stockholm, September 9-11, 2006.
37. Southern Thoracic Surgical Association 53<sup>rd</sup> Annual Meeting. Invited speaker and moderator. Tucson, Arizona, November 8-11, 2006.
38. The Society of Thoracic Surgeons 43<sup>rd</sup> Annual Meeting. Invited Speaker. and moderator. San Diego, CA. January 26-31, 2007.
39. Emory Practical Intervention Course (EPIC) Live Demonstration Course Surgically Presentation, The Goal of Optimal Coronary Revascularization in 2007. April 26-28, 2007.
40. The American Association for Thoracic Surgery 87<sup>th</sup> Annual Meeting. Invited speaker and moderator, Washington, DC. May 5-9-2007
41. International Society of Minimally Invasive Cardiothoracic Surgery, Annual Scientific Meeting. Invited speaker and moderator. Rome, Italy. June 6-9, 2007.
42. The 9<sup>th</sup> Annual Meeting of OFF-PUMP CABG Symposium, Invited speaker. Tokyo, Japan, August 7-2007.
43. American Heart Association Scientific Session, Invited Speaker. Orlando, FL. November 5-7, 2008.
44. Southern Thoracic Surgical Association 54<sup>th</sup> Annual Meeting. Invited speaker and moderator. Ft. Myers, Florida, November 7-10, 2007.
45. The Society of Thoracic Surgeons 44<sup>th</sup> Annual Meeting. Invited Speaker and moderator. Ft. Lauderdale, FL. January 25-30, 2008.
46. The American Association for Thoracic Surgery 88<sup>th</sup> Annual Meeting. Invited speaker and moderator, San Diego, CA. May 10-14, 2008.

47. International Society of Minimally Invasive Cardiothoracic Surgery, Annual Scientific Meeting. Invited speaker and moderator. Boston, MA. June 10-14, 2008.

**Bibliography:**

***Published Peer-Reviewed Research Articles:***

1. Distefano R, Kupiec-Weglinski JW, Puskas JD, et al. 1987. Therapeutic efficacy of anti-interleukin-2 receptor monoclonal antibodies in experimental organ transplantation. *Surg. Forum*; XXXVIII: 344-6.
2. Puskas JD, Maccherini M, Keshavjee S, Slutsky AS, Patterson GA, Edelson JD. 1990. Low potassium dextran is superior to Euro-Collins as a preservative solution in a type II pneumocyte cell culture model. *AM Rev Respir Dis*; 141(4): A406.
3. Cardoso PFG, Spino M, Mayer E, et al. 1991. Use of an in situ canine lung perfusion model to evaluate dopamine clearance by the lung. *J. Pharm Exper Therapeutics*; 259(3): 1271-6.
4. Oka T, Puskas JD, et al. 1991. Low-potassium UW solution for lung preservation. Comparison with regular UW, LPD, and Euro-Collins solutions. *Transplantation* Vol. 52 (6), pp.984-8.
5. Shaw LR, Miller JD, Slutsky AS, et al., 1991. Ethics of lung transplantation with live donors. *Lancet*; 338(8768): 678-81.
6. Oka T, Puskas JD, Mayer E, et al. 1991. Low-potassium UW solution for lung preservation. Comparison with regular UW, LPD and Euro-Colins solutions. *Transplantation*; 52(6):984-8.
7. Mayer E, Cardoso PF, Puskas JD, et al. 1992. Revascularization of heterotopic isografts of the rat trachea using an omentum flap. *Pneumologies*, May; Vol. 46(5), pp.190-5.
8. Mayer E, Cardoso PF, Puskas JD, Patterson GA, Oelert H. 1992. {Revascularization of heterotopic isografts of the rat trachea using an omentum flap} [German]. *Pneumologie*: 46(5): 190-5.
9. Mayer E, Cardoso PF, Puskas JD, et al. 1992. The effect of basic fibroblast growth factor and omentopexy on revascularization and epithelial regeneration of heterotopic rat tracheal isografts. *J Thor Cardiovasc Surg*. 104(1): 180-8.
10. Mayer E, Puskas JD, Cardoso PF, Shi S, Slutsky AS, Patterson GA. 1992. Reliable eighteen-hour lung preservation at 4 degrees and 10 degrees C by pulmonary artery flush after high-dose prostaglandin E1 administration. *J Thor Cardiovasc Surg*. 103 (6): 1136-42.

11. Puskas JD, Hirai T, Christie N, Mayer E, Slutsky AS, Patterson GA. 1992. Reliable thirty-hour lung preservation by donor lung hyperinflation. *J Thor Cardiovasc Surg.* 104(4): 1075-83.
12. Puskas JD, Winton TL, Miller JD, Scavuzzo M, Patterson GA. 1992. Unilateral donor lung dysfunction does not preclude successful contralateral single lung transplantation. *J Thor Cardiovasc Surg.* 103(5): 1015-17.
13. Puskas JD, Cardoso PF, Mayer E, Shi S, Slutsky AS, Patterson GA. 1992. Equivalent eighteen-hour lung preservation with low-potassium dextran or Euro-Collins solution after prostaglandin E1 infusion. *J Thor Cardiovasc Surg.* 104(1): 83-9.
14. Matsuzaki Y, Waddell TK, Puskas JD, et al. 1993. Amelioration of post-ischemic lung reperfusion injury of prostaglandin E1. *Am Rev Respir Dis;* 148 (4 pt 1): 882-9.
15. Hirai T, Waddell TK, Puskas JD, et al. 1993. Prolonged lung allograft survival with a short course of FK 506. *J Thor Cardiovasc Surg.* 105(1): 1-8.
16. Puskas JD, Allen MS, Moncure AC, et al. 1993. Pulmonary arteriovenous malformations: therapeutic options. *Ann Thor Surg.* 56(2): 253-7.
17. Puskas JD, Gertler JP. 1994. Internal jugular to axillary vein bypass for subclavian vein thrombosis in the setting of brachial arteriovenous fistula. *J Vasc. Surg.* 19(5): 939-42.
18. Puskas JD, Oka T, Mayer E, et al., 1994. Hemodilution reduces early reperfusion injury in an ex vivo rabbit lung preservation model. *Ann Thor Surg.* 57(3): 731-5.
19. Puskas JD, Mathisen DJ, Grillo HC, Wain JC, Wright CD, Moncure AC, 1995. Treatment strategies for bronchopleural fistula. *J Thor Cardiovasc Surg.* 109(5): 989-96.
20. Craver JM, Puskas JD, Weintraub W, et al., 1995. Outcome in 600 octogenarians undergoing cardiac surgery: comparison with younger age groups. *J Am Coll Cardiol;* February 183A.
21. Puskas JD. Mathisen DJ. Grillo HC. Wain JC. Wright CD. Moncure AC. 1995. Treatment strategies for bronchopleural fistula. *J Thorac Cardiovasc Surg.* 109(5):989-95; discussion 995-6.
22. Shapiro ME, Kirkman RL, Reed MH, et al., 1987. Monoclonal anti-IL-2 receptor antibody in primate renal transplantation. *Transplant Proc;* 19(1 pt 1): 594-8.

23. Ueno T, Yokomise H, Oka T, et al., 1991. The effect of PGE-1 and temperature on lung functions following preservation. *Transplantation*; 52(4): 626-30.
24. Waddell TK, Hirai T, Piovesan J, et al., 1994; The effect of heat shock on immediate post-preservation lung function. *Clin Invest Med* 17(5): 405-413.
25. Puskas JD, Wright CE, Ronson RS, Brown WM, Gott JP, Guyton RA, 1998. Off-Pump Multivessel Coronary Bypass via Sternotomy is Safe and Effective. *Ann Thor Surg.* 66:1068-72.
26. Bufkin BL, Puskas JD, Vinten-Johansen J, Shearer ST, Guyton RA, 1998. Controlled Intermittent Asystole: Pharmacologic Potentiation of Vagal-Induced Asystole. *Ann Thor Surg.* 66:1185-90.
27. Craver JM, Puskas JD, Weintraub WW, Shen Y, Guyton RA, Gott JP, Jones EL, Whitehead JB. 1999. 601 Octogenarians Undergoing Cardiac Surgery: Outcome and Comparison with Younger Age Groups. *Ann Thor Surg.* 67:1104-10.
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**Manuals, videos, computer programs, and other teaching aids:**

- Teaching Video on multivessel off-pump CABG for the Society of Thoracic Surgeons, June 2000.
- Live Telesurgery Demonstration for OPCAB Training Courses at Emory University Hospital 1999, 2000.
- Course Director, OPCAB/PADCAB course, Sept. 14, 2000. Emory University Hospital, Cardiothoracic Research Laboratory
- Articles in Emory Momentum on OPCAB, 1999 and Spring 2000 issues.
- Live Telesurgery of multivessel OPCAB at Emory University Hospital transmitted to the Cardiothoracic Techniques and Technologies meeting, New Orleans, LA, January 26, 2001.
- Creation of teaching video for prospective cardiac surgical patients at Emory University, February 2001.
- Creation of OPCAB instructional videos for cardiac surgeons, distributed by Medtronic, 2001 and 2002.
- Creation of teaching video: “A Challenging Case of Off-Pump CABG in Dextrocardia” presented at Fifth Annual New Era Cardiac Care, Dana Point, California. January 4-6, 2002.
- New York Time, Sunday Edition, featured with photo in article on OPCAB, May 13, 2003.
- International Herald Tribune, featured with photo in article on OPCAB, May 15, 2003.
- Southern Thoracic Surgical Association 50<sup>th</sup> Annual Meeting, surgical video presentation: “Off-pump All-Arterial Coronary Bypass: Surgical Revascularization for the New Millennium”. Naples, FL, November 13-15, 2003.
- Print, radio and TV coverage of the JAMA 2004;291:1841-9 paper in over 250 major new outlets nation-wide and numerous international news agencies as well, April, 2004.
- Local/National Television Media “spots” for OPCAB:
  - Local human interest TV news spots on Channel 2 and Channel 11 in 1998 and 1999.
  - Discovery Channel story on innovative techniques in cardiac surgery, taped Mar. 2000, aired Dec. 2000.
  - CNN story on OPCAB taped spring of 2000, aired fall of 2000.
- American Association for Thoracic Surgery, Education Committee, 2006. Created a 40-minute, interactive e-learning module for OPCAB, sponsored by AATS, in collaboration with the Cleveland Clinic and Accelera Inc (John’s Hopkins e-learning technology corporation). Multiple intraoperative video clips shot at Emory Crawford Long Hospital. Instructional script, quizzes and CME material all developed at Emory, funded by AATS. This is the first comprehensive e-learning module developed by AATS for education of practicing surgeons and CT residents. Accessible online at [aats.org](http://aats.org).