CURRICULUM VITAE ARTHUR ANTHONY BERT, M.D.

Department of Anesthesiology

Rhode Island Hospital

593 Eddy Street

Providence, Rhode Island 02903

PH: 401-444-5142 FAX: 401- 444-5083 abert@lifespan.org

EDUCATION

Undergraduate: 1977 Brown University, Biomedical Sciences, A.B.,

Magna Cum Laude

Medical School: 1977 – 1981 Mount Sinai School of Medicine, M.D.,

1980 – 1981 Alpha Omega Alpha (President)

1981 Basic Sciences Achievement Award, 1981

POSTGRADUATE TRAINING

Internship 1981-82 Beth Israel Hospital, Boston, MA.,

Internal Medicine

Residency 1982-84 Beth Israel Hospital, Boston, MA.,

Resident in Anesthesia

1984 Beth Israel Hospital, Boston, MA.,

Chief Resident in Anesthesia

Fellowships Beth Israel Hospital, Boston, MA.,

Fellow in Cardiac Anesthesia, July - Dec., 1984

Children's Hospital, Boston, MA.

Fellow in Pediatric Anesthesia, Jan. - June, 1985

Certificate in Business Administration,

American Society of Anesthesiologists, Jan – Dec, 2005

POSTGRADUATE HONORS AND AWARDS

Dr. Nathan Sidel Prize for Outstanding Medical House Officer, Beth Israel Hospital, June 1982

Top Physicians, Rhode Island Monthly magazine,

May 2000, 2002, 2004, 2006

Top Doctors 2002, Center for the Study of Services, Washington, DC, January 2002

Guide to America's Top Physicians, Consumers' Research Council of America, Washington, DC, Jan 2005, 2006, 2007, 2008

Teaching Recognition Award, Brown Medical School, May 2005

Dr. Charles A. Hill Award, R.I. Medical Society, September 2006

Guide to America's Top Anesthesiologists, Consumers' Research Council of America, Washington, DC, November 2006, 2007, 2008

PROFESSIONAL LICENSES and BOARD CERTIFICATION

Diplomate of the National Board of Echocardiography in Perioperative Transesophageal Echocardiography, 2007

Testamur of the National Board of Echocardiography in Perioperative Transesophageal Echocardiography, 1998

Diplomate of the American Board of Anesthesiology, 1985

Diplomate of the National Board of Medical Examiners, 1982

Rhode Island Licensure, 1986

Massachusetts Licensure, 1984

ACADEMIC APPOINTMENTS

Clinical Professor of Surgery (Anesthesiology), Warren Alpert School of Medicine at Brown University, 2002-Present

Clinical Associate Professor of Surgery (Anesthesiology), Brown Medical School, 1995-2001

Adjunct Assistant Professor of Anesthesiology, University of Massachusetts Medical School, 1991 present

Clinical Assistant Professor of Surgery (Anesthesiology), Brown Medical School, 1988-95

Clinical Instructor in Anesthesia, Harvard Medical School, 1985-86

Clinical Fellow in Anesthesia, Harvard Medical School, 1982-84

Clinical Fellow in Medicine, Harvard Medical School, 1981-82

HOSPITAL APPOINTMENTS

Director of Experimental Cardiac Surgery, Anesthesiology and Cardiac Imaging, Cardiac Surgery Research Laboratories, Children's Mercy Hospital, Kansas City, MO, 2007 – present

Senior Attending Anesthesiologist, Rhode Island Hospital and Hasbro Children's Hospital, 2001 – present

Chief of Cardiac Anesthesia, Landmark Medical Center, Woonsocket, RI, 2005 – 2007

Director of Cardiothoracic (Adult) Anesthesia, Rhode Island Hospital, 1986- 2002

Director of Pediatric Cardiac Anesthesia, Rhode Island Hospital, 1996 - 2005

Medical Director of Perfusion Technologists, Rhode Island Hospital, 1996-2002; 1992-93

Consultant Anesthesiologist (Pediatrics), Womens & Infants Hospital, 1992 - present

Visiting Consultant, Malhotra Heart Institute & Medical Research Center, New Delhi, India, 1995 - 2005

Attending Physician, Cardiovascular Surgical Intensive Care Unit, Rhode Island Hospital, 1989 -1992

Associate Anesthesiologist, Rhode Island Hospital. 1990 - 2000

Assistant Anesthesiologist, Rhode Island Hospital, 1986 - 1989

Director of Cardiac Anesthesia, Beth Israel Hospital, 1986

Associate Anesthetist, Beth Israel Hospital, 1985 - 1986

OTHER PROFESSIONAL APPOINTMENTS

Blue Cross Blue Shield of Rhode Island, Rhode Island non-profit corporation and major third party healthcare payer. Director, 1998 – 2004; Corporation Member 1998 – present

Providence Anesthesiologists, Inc., Largest anesthesia practice in State of Rhode Island. Managing Partner 2000-2006; Treasurer, 1993-2006; Director, 1991-2003

New England Medical Billing, Inc. Private corporation conducting medical data management inclusive of billing and collections, compliance monitoring and medical practice support. Director, 1994-present; Treasurer, 2006present

Eisai Pharmaceuticals, Inc. International public pharmaceutical company Consultant, 2000-2004

State of Rhode Island Nurse Anesthetists Advisory Board, Governor's Appointee, 1992-97.

Medical Director, EMT Oral Intubation Training Program, R.I. Dept. of Health, Division of Emergency Medical Services, 1988-1996.

Medical Director, Burrilleville Ambulance Corps, 1988-1996.

Rhode Island Medicare Carrier, Physician's Advisory Board, R.I. Society of Anesthesiologists Appointee, 1992-95.

Rhode Island Medical Society Chairman, Political Action Committee, 1994-96.

Rhode Island Medical Society, Chairman, Committee on Medicaid Reform, 1992.

Ocean State Physicians Health Plan Utilization Review Committee, 1987-88.

HOSPITAL COMMITTEES

Medical Executive Committee, Landmark Medical Center, 2006-2007.

Search Committee Member, Associate Professor of Pediatrics, Division of Pediatric Cardiology, Rhode Island Hospital and Brown University, 2001-02.

Search Committee Member, Assistant Professor, Cardiothoracic Surgeon, Lifespan Academic Medical Center and Brown University, 2000-01.

Lifespan Cardiovascular Service Line Design, Physician Advisory Committee, 1997- 99.

Lifespan PSO Finance Committee, 1996-1999.

Rhode Island Hospital- Miriam Hospital PSO Study Group, 1996-97.

Rhode Island Hospital Transfusion Committee, 1987-1992

PROFESSIONAL SOCIETIES

Alpha Omega Alpha, Medical Honor Society, 1980-present

American Society of Anesthesiologists, 1982-present

Rhode Island Society of Anesthesiologists, 1986-present

Society of Cardiovascular Anesthesiologists, 1987-present

Chairman, Governmental Affairs Committee, 1990-95

Interdisciplinary Professional Practice Committee, 2009-

American College of Physician Executives, 2000-

American Medical Association, 1991- present

Rhode Island Medical Society, 1991- present

PUBLICATIONS LIST

Bert AA: Sodium nitroprusside- induced cyanide intoxication. Anesthesiology Review XI (8): 12-15, 1984.

Bert AA, Laasberg LH: Aseptic meningitis following spinal anesthesia. A complication of the past? Anesthesiology 62:674-677, 1985.

Hedley-Whyte J, Laasberg LH, Joffe JM, **Bert AA**: Clearance of radiographic contrast media and renal function: Clinical application of a new diatrizoate assay. Fed. Proc. 45: 961, 1986.

Hindman BJ, **Bert AA**: Malignant esophagorespiratory tract fistulas: Anesthetic considerations for exclusion procedures utilizing esophageal bypass. J. Cardiothor Anesth. 1 (5): 438-447, 1987.

DiNardo JM, **Bert AA**, Schwartz MJ, Johnson RG, Thurer RL, Weintraub RW: Effect of various vasoactive drugs on left internal mammary artery and saphenous vein graft flows in man. J Thorac Cardiovasc Surg; 102: 730-735, 1991.

Bert AA: Perioperative right ventricular failure. R I Med; 75(2): 97-103, 1992.

Bergus BO, Feng WC, **Bert AA**, Singh AK: Aortic valve replacement (AVR): Influence of age on operative morbidity and mortality. Eur J Cardiothor Surg 6:118-121, 1992.

Bert AA, Feng WC, Singh AK: The role of erythropoietin in Jehovah's Witnesses requiring cardiac surgery. J Cardiothor Vasc Anesth 7:95-102, 1993.

Feng WC, Singh AK, **Bert AA**, Sanofsky S, Crowley JP: Acute perioperative thrombosis of aorta with multiple organ failure associated with heparin-induced thrombocytopenia. Ann Thorac Surg 55:1555-7, 1993.

Singh AK, Feng WC, **Bert AA**, Rotenberg FA: Warm body, cold heart surgery: Clinical experience in 2817 patients. Eur J Cardiothor Surg 7:225-230, 1993.

Bert AA, Singh AK: Right ventricular function following normothermic versus hypothermic cardiopulmonary bypass. J Thorac Cardiovasc Surg 106:988-996, 1993.

Singh AK, Feng WC, **Bert AA**, Rotenberg FA: Warm body, cold heart: myocardial revascularization in 2383 consecutive patients. J Cardiovasc Surg 34:415-21, 1993.

Singh AK, **Bert AA**, Feng WC: Neurological complications during myocardial revascularization using warm-body, cold-heart surgery. Eur J Cardiothor Surg 8:259-264, 1994.

Singh AK, **Bert AA**, Feng WC, Rotenberg FA: Stroke during coronary artery bypass grafting using hypothermic versus normothermic perfusion. Ann Thor Surg 59:84-89, 1995.

Bert AA. Myocardial rewarming during normothermic cardiopulmonary bypass; Reply. J Thorac Cardiovasc Surg 109:597, 1995.

Feng WC, **Bert AA**, Browning RA, Singh AK: Open cardiac massage and periresuscitative cardiopulmonary bypass for cardiac arrest following cardiac surgery. J. Cardiovasc Surg 36:319-321, 1995. Feng WC, **Bert AA**, Singh AK: Normothermic cardiopulmonary bypass. A review. Asian Cardiovasc Thorac Ann 4:66-74, 1996.

Sawant D, Singh AK, Feng WC, **Bert AA**, Rotenberg F: St. Jude Medical cardiac valves in small aortic roots: Follow-up to sixteen years. J. Thorac Cardiovasc Surg 113:499-509, 1997.

Bert AA, Stearns GT, Feng WC, Singh AK: Normothermic cardiopulmonary bypass: A Review. J. Cardiothor Vasc Anesth 11:91-99, 1997.

Sawant D, Singh AK, Feng WC, **Bert AA**, Rotenberg F: Nineteen- millimeter aortic St. Jude Medical heart valve prosthesis: Up to sixteen years' follow-up. Ann Thorac Surg 63:964-70, 1997.

Bert AA. Systemic effects of normothermic cardiopulmonary bypass. Artificial Organs 22 (1):77-81, 1998.

Buchholz BJ, **Bert AA**, Price DR, Hopkins RA, Stearns GT: Veno-arterial modified ultrafiltration in children after cardiopulmonary bypass. J Extra-Corporeal Tech 31 (1):47-49, 1999.

Hong T, Maish MS, Cohen J, Fitzpatrick P, **Bert AA**, Harper JS, Feng D, Hoffman-Kim D, Hopkins RA: Reproducible echocardiography in juvenile sheep and its application in the evaluation of a pulmonary valve homograft implant. Contemporary Topics in Lab Animal Science 39:15-21, 2000.

Maslow A, Stearns G, **Bert A**, Feng W, Price D, Schwartz C, MacKinnon S, Rotenberg F, Hopkins R, Cooper G, Singh A, Loring S: Monitoring endtidal carbon dioxide during weaning from cardiopulmonary bypass in patients without significant lung disease. Anesth & Analg 92:306-313, 2001.

Bert AA, Reinert S, Singh AK: A beta-blocker, not magnesium, is effective prophylaxis for atrial fibrillation following coronary bypass surgery. J Cardiothor Vasc Anesth 15:204-209, 2001.

Bert AA, Maslow A: Utility of transesophageal echocardiography in non-cardiac surgery. Med & Health/ RI 84 (10):333-336, 2001.

Bert AA, Maslow A: TEE for intraoperative monitoring and management of vena caval tumor. Med & Health/ RI 84 (10):337-338, 2001.

Maslow A, **Bert A**, Schwartz C, MacKinnon S: Transesophageal echocardiography in the noncardiac surgical patient. International Anesth Clinics 40 (1):73-132, 2002.

Maslow A, Schwartz C, **Bert AA**: Pro: Single plane echocardiography provides an accurate and adequate examination of the native mitral valve. J Cardiothorac Vasc Anesth 16 (4):508-514, 2002.

Maslow AD, Regan MM, Schwartz C, **Bert A**, Singh A: Inotropes improve right heart function in patients undergoing aortic valve replacement for aortic stenosis. Anesth & Analg 98:891-902, 2004.

Hopkins RA, **Bert AA**, Buchholz B, Guarino K, Meyers M: Surgical patch closure of atrial septal defects. Ann Thorac Surg 77:2144-50, 2004.

Hilbert SL, Yanagida R, Souza J, Wolfinbarger L, Jones AL, Krueger P, Stearns G, **Bert AA**, Hopkins R: Prototype anionic detergent technique used to decellularize allograft valve conduits evaluated in the right ventricular outflow tract in sheep. J Heart Valve Disease 13:831-840, 2004.

Maslow A, **Bert AA**, Ng T: Thoracotomy after myocardial infarction and intracoronary stenting: a balance between myocardial recovery and procedural risk. J Cardiothorac Vasc Anesth 19 (6):794-800, 2005.

Hoffman-Kim D, Maish MS, Krueger PM, Lukoff H, **Bert AA**, Hong T, Hopkins RA: Comparison of three myofibroblast cell sources for tissue engineering cardiac valves. Tissue Engineering 11:1-12, 2005.

Bert AA, Maslow A: Advanced cardiac anesthesia imaging techniques. Med & Health/RI 89 (1):20-28, 2006.

Maslow AD, Schwartz CS, **Bert AA**, Hurlburt P, Gough J, Stearns G, Singh AK: Endovascular Vein Harvest: Systemic Carbon Dioxide Absorption. J Cardiothorac Vasc Anesth 20 (3):347-352, 2006.

Maslow AD, **Bert AA**, Slaiby J, Carney W, Marcaccio E: The effects of vasoactive agents on flow through saphenous vein grafts during lower-extremity peripheral vascular surgery. J Cardiothorac Vasc Anesth 21 (3):344-350, 2007.

Maslow AD, Chaudrey A, **Bert AA**, Schwartz C, Singh A: Perioperative renal outcome in cardiac surgical patients with preoperative renal dysfunction: aprotinin versus epsilon aminocaproic acid. J Cardiothorac Vasc Anesth 22 (1): 6-15, 2008.

Hopkins RA, Gitter H, Stave J, **Bert AA**, Atalay M: Stable partial dehiscence of aortic homograft inserted freehand by using the subcoronary intraaortic root noncoronary sinus Ross scallop inclusion technique. J Thorac Cardiovasc Surg 135:214-216, 2008.

Hopkins RA, Jones AL, Wolfinbarger L, Moore MA, **Bert AA**, Lofland GK. Decellularization reduces calcification, while improving both durability and one year functional results of pulmonary homograft valves in juvenile sheep. J Thorac Cardiovasc Surg 137:907-13, 2009.

BOOK CHAPTERS

Bert AA, MacKinnon SF. The role of transesophageal echocardiography during the Ross procedure. In Hopkins RA (ed). Cardiac Reconstructions with Allograft Tissues. New York: Springer; 2005: 396-401.

Bert AA. Guidelines for use of aprotinin with the Ross procedure. In Hopkins RA (ed). Cardiac Reconstructions with Allograft Tissues. New York: Springer; 2005: 402-407.

ABSTRACTS

Bert AA, DiNardo JA, Schwartz MJ, Weintraub RW: Effects of vasoactive drugs on left internal mammary artery and saphenous vein graft flows in man. Presented at 10th Annual Meeting of Society of Cardiovascular Anesthesiologists, April, 1988; New Orleans, LA.

Bergus BO, Feng WC, **Bert AA**, Singh AK: Aortic valve replacement: Influence of age on operative morbidity and mortality. Presented at 71st Annual Meeting of the New England Surgical Society, September, 1990; Newport, R.I.

Bert AA, Singh AK: Right ventricular function following normothermic versus hypothermic cardiopulmonary bypass. Presented at 6th European Association for Cardio-Thoracic Surgery Meeting, September, 1992, Geneva, Switzerland

Singh AK, Feng WC, **Bert AA**: Warm body, cold heart surgery: Clinical experience in 2817 patients. Presented at 6th Annual European Association for Cardio-thoracic Surgery Meeting, September, 1992, Geneva, Switzerland

Bert AA, Singh AK: Right ventricular function following normothermic versus hypothermic cardiopulmonary bypass. Presented at 15th Society of Cardiovascular Anesthesiologists Meeting, April, 1993, San Diego, CA.

Singh AK, **Bert AA**, Feng WC: Neurological complications during myocardial revascularization using warm-body, cold-heart surgery. Presented at 7th Annual European Association for Cardiothoracic Surgery Meeting, September, 1993, Barcelona, Spain.

Sawant D, Singh AK, Feng WC, **Bert AA**: St. Jude Medical cardiac valve in small aortic root: Follow-up to 16 years. Presented at Annual Meeting of American Association for Thoracic Surgery, April, 1996, San Diego, CA.

Maslow A, **Bert AA**, MacKinnon S, Feng W, Singh A: TEE evaluation of the mitral apparatus: Single plane versus multiplane exam. Presented at 22nd Annual Meeting of Society of Cardiovascular Anesthesiologists, May, 2000, Orlando, FL.

Bert AA, Reinert S, Singh AK. A beta-blocker, not magnesium, is effective prophylaxis for atrial tachyarrhythmias following coronary bypass surgery. Presented at 7th International Congress of Cardiothoracic & Vascular Anesthesia, June, 2000, Quebec City, Canada

Sutton TS, **Bert AA**, Marcaccio EJ, Slaiby J, Carney W: Risk assessment for atheroembolism during abdominal aortic surgery: potential applications for transesophageal and epiaortic ultrasound imaging. Presented at 23rd Annual Meeting of Society of Cardiovascular Anesthesiologists, May, 2001, Vancouver, Canada.

Hilbert S, Maish M, Yanagida R, Souza J, Stearns G, **Bert A**, Hopkins R: Evaluation of processing variables for devitalized heart valves implanted in juvenile sheep. Presented at 6th Annual Hilton Head Workshop, "Prosthetic Heart Valves", March, 2002, Hilton Head, SC

Ropacki S, Stern RA, **Bert AA**, Ropacki MT, Rogers BC. A preliminary examination of the influence of cognitive reserve on neuropsychological functioning after coronary artery bypass grafting (CABG). Presented at 23rd Annual meeting of National Academy of Neuropsychology, October, 2003, Dallas TX.

Hilbert SL, Yanagida M, Sousa J, Wolfinbarger L, Linthurst-Jones A, Krueger P, Stearns G, **Bert AA**, Hopkins RA: A comparison of the explant pathology findings of anionic and non-ionic detergent decellularized heart valve conduits. Presented at 8th Annual Georgia Institute of Technology Workshop, "Cardiovascular Tissue Engineering from Basic Biology to Cell-based Therapies" March 2004, Hilton Head, SC.

Hilbert S, Yanagida R, Ketchedjian A, Moore R, Cooper G, **Bert AA**, Hopkins RA: Pulmonary monocusp and mitral bi-flab valves fabricated from small intestinal submucosa: a chronic sheep study. Presented at 9th Annual Georgia Institute of Technology Workshop, "ET 2005: Engineering Tissues", March 2005, Hilton Head, SC.

Ketchegjian A, **Bert AA**, Hopkins RA: Adventitial fibroblasts as an in vivo cell source for recellularizing tissue engineered vale scaffolds derived from allograft valves. Presented at 3rd Biennial Meeting of the Society for Heart Valve Disease, June, 2005, Vancouver, Canada.

Arron B, Ducharme J, Lucas P, Palumbo M, **Bert AA**: A novel approach to assess serial perioperative intraocular retinal artery blood flows and volumes in patients at risk for perioperative vision loss. Presented at 2005 Annual Meeting of American Society of Anesthesiologists; October 2005, Atlanta, GA.

Hopkins RA, Linthurst-Jones A, Wolfinbarger L, Moore MA, **Bert AA**, Lofland GK: Decellularization reduces calcification while improving both durability and one year functional results of pulmonary homograft valves in juvenile sheep. Presented at 34th Annual Meeting of Western Thoracic Surgical Association; June 2008, Kona, Hawaii.

INVITED PRESENTATIONS

"Pro/Con debate: "Should every patient undergoing general anesthesia receive neuromuscular blocker reversal?" 14th Annual RI Anesthesia Conference, The Warren Alpert Medical School of Brown University, Providence, RI, May 9, 2009.

"Evidence-based guidelines for blood conservation in cardiac surgery." Society for the Advancement of Blood Management, New England Regional Blood Management Conference, Providence, RI, March 28, 2009.

Tricuspid and Pulmonary Valves", 5th Annual Perioperative Echocardiography and Echo Boards Review, Harvard Medical School, Boston, MA, September 4, 2008.

"Anesthetic management of Jehovah Witness for long segment posterior spinal fusion: Intraoperative blood-sparing techniques." Society for the Advancement of Blood Management, New England Regional Blood Management Conference, Providence, RI, April 12, 2008.

"Tricuspid and Pulmonary Valves", 4th Annual Perioperative Echocardiography and Echo Boards Review, Harvard Medical School, Boston, MA, September 7, 2007.

"Cardiac Anesthesia, Invasive Monitoring & Perioperative Transesophageal Echocardiography: Point-of-Care Coding", American Academy of Professional Coders, Providence, RI, September 6, 2007.

"Intraoperative imaging during complex cardiac reconstructions." Cardiac Surgery Lecture Series, Children's Mercy Hospital, Kansas City, MO, June 28, 2007.

"Managing Cardiac Risk." 12th Annual Newport Anesthesia Conference, Brown University School of Medicine, Newport, RI, May 12, 2007.

"Transfusion-free medicine and surgery. The role of the Anesthesiologist." Pediatric Grand Rounds, Hasbro Children's Hospital, Providence, RI, November, 2006.

"Anesthetic management of child with congenital heart disease for noncardiac surgery." 55th Annual New England Assembly of Nurse Anesthetists, Nashua, NH, April, 2002.

"A muscle biopsy is necessary in all patients with malignant hyperthermia. Con: the argument against." 7th Annual Newport Anesthesia Conference, Brown University School of Medicine, Newport, RI, September, 2001. "Mediastinal masses: Preoperative evaluation and anesthetic management." 5th Annual Newport Anesthesia Conference, Brown University School of Medicine, Newport, R.I., September, 1999.

"The pulmonary artery catheter: To use or not to use?" 51st Annual New England Assembly of Nurse Anesthetists; Newport, RI, October, 1998.

"Anesthetic management of aortic reconstructive surgery." 3rd Annual Newport Anesthesiology Conference, Brown University School of Medicine, Newport, R.I., October, 1997.

"Hypothermia revisited: warm body, cold heart perfusion." 11th World. Congress of the International Society for Artificial Organs, Providence, R.I., June, 1997.

"Perioperative cardiac dysrhythmias." 48th Annual New England Assembly of Nurse Anesthetists, Burlington, MA., April, 1995.

"Faith at work in Medicine." St. John's Church, Adult Education Fall Forum, Barrington, R.I., October, 1994.

"Preoperative evaluation of the cardiac patient for anesthesia." William McKenney Memorial Conference at Kent County Memorial Hospital, Warwick, R.I., May, 1994.

"Anesthesia for the cardiac patient undergoing noncardiac surgery." Vermont Association of Nurse Anesthetists Spring Symposium, Manchester, VT, May, 1994.

"Anesthesia for the cardiac patient undergoing noncardiac surgery." 46th Annual New England Assembly of Nurse Anesthetists; Warwick, R.I., October, 1993.

"Clinical Applications of Right Ventricular Ejection Fraction/Volumetric Catheter." Anesthesia Teaching Conference at Hartford Hospital, Hartford, CT., May, 1992.

"Perioperative right ventricular dysfunction." Anesthesia Conference at the New England Medical Center, Boston, MA., October, 1991.

"Clinical applications of right ventricular ejection fraction/volumetric catheter." Anesthesia Grand Rounds at the University of Massachusetts Medical Center, Worchester, MA., May, 1991.

"Economics of cardiac anesthesia." 13th Annual Meeting of Society of Cardiovascular Anesthesiologists, San Antonio, TX, May, 1991.

"Perioperative cardiac morbidity in non-cardiac surgery." Surgical Grand Rounds, Memorial Hospital, Pawtucket, RI, March, 1990.

"Isoflurane and coronary artery steal." Anesthesia Grand Rounds, South Shore Hospital, MA., March, 1988.

"Treatment of perioperative hypertension." Rhode Island Society of Post-Anesthesia Nurses Annual Meeting, Newport, R.I.; June, 1987.

"Anesthetic implications of pediatric cardiopulmonary physiology." Anesthesia Grand Rounds, Mount Auburn Hospital, Cambridge, MA., September, 1985.

RESEARCH GRANTS

Medtronic, Inc. Carmeda Extracorporeal Circuit and Low-Dose Heparin in High-Risk Cardiac Surgery. \$80,000. October, 1994.

UNIVERSITY TEACHING

Course Director
Brown University School of Medicine &
Department of Anesthesiology, Rhode Island

Hospital, 6th Annual Newport Anesthesiology Conference: Current Debates; September 16, 2000 Course Director Brown University School of Medicine & Department of Anesthesiology, Rhode Island Hospital, 3rd Annual Newport Anesthesiology Conference: Managing Critical Incidents in Anesthesia; October 4, 1997

Brown Medical School Course #319B, Anesthesiology, 1988-

Brown University Summer Studies Program, "Introduction to Medicine", 1995-98.

Training of anesthesia residents from University of Massachusetts Medical Center and New England Medical Center programs, 1992-present

Training of anesthesia residents from Tufts-New England Medical Center Program, 1996-present.

Training of anesthesia residents from Boston Medical Center Program, 1995-2003.

Training of student nurse anesthetists from Northeastern University Bouve School of Nurse Anesthesia, 2003-present.