



**BOARD CERTIFICATION:**

- 1981**            **National Board of Medical Examiners (no.233639)**
- 1986**            **American Board of Surgery, General Surgery (041114)**
- 1988**            **Fellow of the Royal College of Surgeons, Canada**  
**Cardiovascular and Thoracic Surgery**  
**American Board of Thoracic Surgery**
- 2002**            **American Board of Thoracic Surgery, recertification**

**PROFESSIONAL ASSOCIATIONS and HONORS:**

- 1978**            **University of Massachusetts Medical School Scholar**
- 1979**            **University of Massachusetts Medical School Scholar**
- 1983**            **Fraser Gurd Surgical Research Award**  
**The Western Thoracic Surgical Society**  
**Resident Essay Award**
- 1986**            **Canadian Heart Foundation Fellowship**
- 1992**            **Fellow, American College of Surgery**  
**1993**            **Member of Society of Thoracic Surgeons**
- 1994**            **New Haven Medical Society, Connecticut Medical Society**
- 1995**            **Fellow , Royal College of Surgery, Canada**
- 2005**            **Honorary Professor of Cardiac Surgery**  
**Pavlov Medical University of Saint Petersburg**  
**Russia**
- 2006**            **Guardian Board of the Almazov Foundation**  
**For Medical Education**  
**St. Petersburg , Russia**
- Medical Director of the Cardiothoracic Surgical**  
**Physicians Assistant Program, Yale New Haven Hospital**
- President, The Almazov Foundation of North America**

## **LECTURES:**

- 1. “Skeletal Muscle Cardiac Assist” at Grand Rounds, Bridgeport Hospital, Bridgeport, Connecticut, March 1991**
- 2. “Skeletal Muscle Cardiac Assist” at Grand Rounds, Lawrence and Memorial Hospital, New London, Connecticut, October 1991.**
- 3. “Mitral Valve Replacement” at Grand Rounds, Danbury Hospital, Danbury, Connecticut, August 1995.**
- 4. “Options in Aortic Valve Surgery” to Pavlov State Medical University, St. Petersburg, Russia, September 2004**
- 5. “Minimally Invasive Coronary Artery Surgery” to Federal Institute for Heart , Lung And Transfusion, St. Petersburg, Russia 2007**

## **SURGICAL ACTIVITIES:**

### **Yale-New Haven Hospital:**

**Introduction of Aortic homograft 1993**  
**Introduction of Mitral homograft 1995**  
**Introduction of Radial Artery grafting 1995**  
**Introduction of Ross Procedure 1996**  
**Introduction of Beating Heart Coronary Surgery 1999**

### **Cardiology Grand Rounds Yale University School of Medicine**

**Mitral Valve Repair, January 1995**  
**Ross Procedure, March 1998**  
**Beating Heart Coronary Surgery, November 2004**

**Chief Surgeon for Healing the Children Surgical Mission**  
**St Petersburg, Russia 1995-2006**

**Director of the Almazov Foundation North America, (2006- present)**

**Medical Supervisor Cardiothoracic Surgical Physician Assistants**  
**Yale-New Haven Hospital (2007- present)**

## BIBLIOGRAPHY:

### PEER-REVIEWED ORIGINAL RESEARCH PAPERS

1. **Dewar ML, Drinkwater, D, Wittnich, C, Chiu RC-J.** Synchronously Stimulated skeletal muscle graft for myocardial repair: An experimental study. *J Thorac Cardiovasc Surg* 1984; 98:325-331.
2. **Wittnich C, Dewar ML, Chiu RC-J.** Myocardial protection: Heparin induced free fatty acid elevations and its prevention. *J Surg Res* 1984; 36:527-531
3. **Dewar ML, Blundell PE, Lidstone D, Herba MJ, Chiu RC-J.** Effects of abdominal aneurysmectomy, aorto-iliac bypass and angioplasty on male sexual potency: A prospective study. *Can J Surg* 1985; 28:154-157
4. **Dewar ML, Rosengarten MD, Blundell PE, Shiu RC-J.** Perioperative Holter monitoring and computer analysis of Perioperative Holter monitoring and computer analysis of dysrhythmias in cardiac surgery. *Chest* 1985; 87:593-597
5. **Brister S, Fradet G, Dewar M, Wittnich C, Lough J, Chiu RC-J.** Transforming skeletal muscle for myocardial assist: A feasibility study. *Can J Surg* 1985; 28:341-344
6. **Walsh G, Dewar ML, Khalafalla A, Neilson IR, DeSimon J-H, Chiu RC-J.** Characteristics of transformed fatigue resistant skeletal muscle for long-term cardiac assist by extra-aortic balloon counter-pulsation. *Surg Forum* 1986; 37:205-207.
7. **Walsh G, Dewar M, Neilson I, DeSimon J-h, Lough J, Khalafalla A, Chiu RC-J.** Stimulation parameters of skeletal muscle for cardiac assist. *Proceedings of the 8<sup>th</sup> Annual Conference of the IEEE Engineering in Medicine and Biology Society I.* 1986; 62-64.
8. **Dewar ML, Rosengarten MD, Samson R, Wittnich C, Blundell PE, Shiu RC-J.** Is high potassium solution necessary for reinfusions in "multidose" cold cardioplegia? – A randomized prospective in study using computerized Holter system. *Ann Thorac Surg* 1987; 43:409-415.
9. **Dewar ML, Walsh G, Abraham R, DeSimon J, Root E, Stewart JA, Fraser r, Shiu RC-J.** Left ventricular full thickness cardiomyoplasty with pericardial neoendocardium: Experimental development of a surgical procedure. *Ann Thorac surg* 1987; 44:618-624
10. **Chiu RC-J, Walsh GL, Dewar ML, DeSimon J-H, Khalafalla AS, Ianuzzo D.** Implantable extra-aortic balloon assist powered by transformed fatigue resistant skeletal muscle. *J Thorac Cardiovasc Surg* 1987; 94:694-701.

11. **Dewar ML, Chiu RC-J, Gutkowska J, Cantin M, Genest J. Atrial natriuretic peptide response in cardiac surgery. J Thorac Cardiovasc Surg, August 1988.**
12. **.Kochamba G, Desrosiers C, Dewar ML, Chiu RC-J. The muscle-powered dual – chamber counterpulsator: Rheologically superior implantable cardiac assist device. Ann Thorac Surg 1988; 45:620-625.**
13. **Chiu RC-J, Kochamba G, Walsh G, Dewar M, Desrosiers C, Dionisopoulos T, Brady P, Ianuzzo D. Biochemical and functional correlates of myocardium-like transformed skeletal muscle as a power source for cardiac assist devices. J Cardiac Surg 1989; 4:171-179.**
14. **Letsou GV, Franco KL, Kopf GS, Dewar ML, Elefteriades JA, Hammond GL, Baldwin JC. Heart-lung transplantation: Initial experience in New England. Conn Med. 54(8):419-424, 1990.**
15. **Higgins R, Letsou g, Detmer W, Dewar M, Hogan J, Carter D, Ariyan S, Elefteriades J. Accessory skeletal muscle ventricles for circulatory support: Early experience with SMVs in continuity with the circulation. J Basic Appl Myology. 1 (1): 89-94, 1991.**
16. **Higgins RSD, Sanchez JA, DeGuildis L, Dewar ML, Franco KL, Kopf GS, Elefteriades JA, Hammond GI, Baldwin JC. Mechanical circulatory support decreases neurologic complications in the treatment of traumatic injuries of the thoracic aorta. Arch Surg 127:516-519. 1992**
17. **Kopf GS, Kleinman CS, Hijazi ZM, Fahey JT, Dewar ML, Hellenbrand WE: Fenestrated fontan with delayed transcatheter ASD closure: Improved results in high risk patients. J Thorac Cardiovasc Surg. 103:1039-1048, 1992.**
18. **Neghme R, Dewar ML, Kopf GS, Kleinman CS, Talner NS, Hellenbrand WE: Anomalous left coronary artery from main pulmonary artery trunk: Physiological and clinical significance of associated patent ductus arteriosus. Ped Card 13:97-99, 1992**
19. **Letsou GV, Hogan J, Lee P, Kim JH, Ariyan S, Dewar ML, Baldwin JC, Elefteriades JA. 180 and 360 nerve cuff electrodes are equally effective for stimulation of canine thoracodorsal nerve and skeletal muscle. Ann Thorac Surg. 54: 925-31, 1992.**
20. **Dewar ML, Kleinman C, Hellenbrand W, Fahey J, Talner N, Bruckner M, Kopf GS. Neonatal corrections of transposition of the great arteries. The Connecticut Experience. CT Med. 56: 671-4, 1992**
21. **Elefteriades JA, Kopf GS, Hammond GL, Dewar ML, Shaw RK, Baldwin JC: Composite graft**

**With coronary artery button reimplantation: method of choice for aortic root replacement. *Circulation Supp.* 86(4): i-306, 1992**

22. **Braxton JH, Higgins RSD, Schwann TA, Sanchez JA, Dewar ML, Kopf GS, Hammond GL, Elefteriades JA. Reoperative mitral valve surgery via right thoracotomy: Decreased blood loss and improved hemodynamics. *Journal of Heart Valve Disease.* Vol 5, pp. 169-173, 1996**
23. **Fitch J, Fang X, Xiao-En, Dewar ML, Preinsertion Pulmonary Artery Catheter Flushing. *Anesthesiology.* 88(6), 1690-91, June, 1998**
24. **Platis IE, Kopf GS, Dewar ML, Shaw RK, Elefteriades JA. Composite graft with coronary button reimplantation: procedure of choice for aortic root replacement. *Intl J of Angiology* 7: 41-45, 1998**
25. **Moinuddeen K, Quin J, Shaw R, Dewar M, Tellides G, Kopf, Elefteriades JA. Anticoagulation is Unnecessary after biologic aortic valve replacement. *Circulation*, 98 II: 95-9, 1998**
26. **Sudhaker CB, Forman DL, Dewar ML, Shaw RK, Fusi S. Free radial artery grafts: surgical technique and results. *Ann, Plastic Surgery* Apr 40,(4) 408-11. 1998**
27. **Fitch J, Rollins S, Matis L, Alford B, Aranki S, Collard C, Dewar M, Elefteriades J, Hines R, Kopf G, Kraker P, Lan L, O'Hara R, Rinder C, Rinder H, Shaw R, Smith B, Stahl G, Sherman S. Pharmacology and Biological Efficacy of a Recombinant, Humanized Single-chain Antibody C5 Complement Inhibitor in Patients Undergoing Coronary Artery Bypass Graft Surgery With Cardiopulmonary Bypass. *Circulation*, Dec, 21; 28, 1999**
28. **Kim R, Mariconda D, Tellides G, Kopf G, Dewar M, Lin Z, Elefteriades J. Single clamp technique does not protect against cerebrovascular accident in coronary artery bypass grafting. *European Journal of Cardiothoracic Surgery*, 20: 127-132, 2001**
29. **I-Hui Wu, Koullias GJ, Dewar ML, Henry GA. Hemodynamic Compromise from a Right Coronary Artery Pseudoaneurysm After Remote Stent Placement. *Ann. Thor. Surgery.* 79:1062,2005**
30. **Kurup V., Transue S, Wu Y, Rinder H, Barash P, Dewar M. Cardiac Surgery in a Patient with Heparin-Induced Thrombocytopenia—Cautions with Use of the Direct Thrombin Inhibitor, Argatroban *Connecticut Medicine* 70:4,245-250, 2006**
31. **Ozcan C. Russell KS, Dewar ML, Rosenfeld LE, An Unusual Case of Non-bacterial Thrombotic (Marantic) Endocarditis. *Journal of Thoracic and Cardiovascular Surgery.* 2008 (in press)**

## ABSTRACTS

1. Dewar ML, Rosengarten MD, Chiu RC-J, Blundell PE. The relation of perioperative dysrhythmia, myocardial damage and myocardial protection analyzed by Holter monitor and digital computer. *Coin Invest Mud* 1983; 6 (Supply 1) : 32.
2. Dewar ML, Blundell PE, Chiu RC-J, Lidstone D. Effects of aorto-iliac bypass and angioplasty on sexual potency. *Ann Roy Coll Phys Surg Canada* 1983; 16:403.
3. Brister S, Dewar ML, Fradet G, Wittnich C, Lough J, Chiu RC-J. Transforming skeletal muscle for myocardial assist: A feasibility study. *Coin Invest Mud* 1984; 10 (Supply 10):45
4. Dewar ML, Chiu RC-J. Skeletal muscle graft for myocardial repair. (Response to Letter to Editor of Macoviak, JA). *J Thorac Cardiovasc Surg* 1984; 88:794.
5. Chiu RC-J, Neilson IR, Khalafalla AS, Brister SJ, Dewar ML. Synchronously stimulated skeletal muscle powered cardiac assist: Clinical implications. *Proc Neuroelectric Society Fourteenth Meeting. International Symposium on Biomechanics of Muscle, Athens, Greece, June 16-21, 1985.*
6. Chiu RC-J, Neilson IR, Brister SJ, Dewar ML, Khalafalla AS. The strategies against skeletal muscle fatigue in cardiac assist. *Proc Neuroelectric Society Fourteenth Meeting. International Symposium on Biomechanics of Muscle, Athens, Greece, June 16-21, 1985.*
7. Dewar ML, Rosengarten M, Samson R, Blundell P, Wittnich C, Chiu RC-J. Is multidose "hyperkalemic" cardioplegia really necessary? *Chest* 1986; 89:486S.
8. Walsh GI, Dewar M, Khalafalla A, Neilson I, Chiu RC-J. Stimulation parameters for preconditioned skeletal muscle. *Coin Prog Electrophysiol Pacing* 1986; 4: Supply 84.
9. Dewar ML, Walsh GW, Steward JS, Chiu RC-J, Abraham RG. Myocardioplasty and thrombus formation. 10<sup>th</sup> World Congress of Cardiology, Washington DC. Sept. 14-19, 1986 (poster).
10. Dewar ML, Walsh G, Abraham R, DeSimon J, Foot E, Steward JS, Chiu RC-J. Cardiomyoplasty: Technical considerations for a new procedure. *Coin Invest Mud* 1986; 8:B35.
11. Walsh GL, Dewar ML, Neilson IR, DeSimon J-H, Lough J, Khalafalla A, Chiu RC-J. Counterpulsation with fatigue resistant skeletal muscle. *Coin Invest Mud* 1986; 8:B79.
12. Chiu RC-J, Walsh GL, Dewar ML, DeSimon J-H, Khalafalla AS, Ianuzzo D. Implantable extra-aortic balloon assist powered by transformed fatigue resistant skeletal muscle. *Am Assoc Thorac Surg. Chicago, April 6-8, 1987.*

13. O'Brien P, Kochamba G, Walsh G, Dewar M, Chiu RC-J, Ianuzzo CD. Biochemical transformation of electrically stimulated 30 (40) : 200, 1987. (Presented at the 38<sup>th</sup> annual Fall Meeting of Am Physiol Soc, Oct. 1987, San Diego, California.)
14. Ianuzzo CD, O'Brien P, Kochamba G, Walsh g, Dewar M, Chiu RC-J. Biochemical changes is transoformed fatigue resistan skeletal muscle. Devised and Technology Branch, Contractors Meeting 1987, p. 117. (National Institutes of Health, Bethesda, MD, Dec. 8, 1987).
15. Letsou GV, Franco KL, Elefteriades JA, Kopf GS, Dewar ML, Hammond GL, Baldwin JC. Current status of lung transplantation in New England. Presented and published at New England Surgical Society, sty Annual Meeting, October 1990.
16. Letsou GV, Franco KL, Hammond GL, Elefteriades JA, Kopf GS, Dewar ML, Baldwin JC. Sucessful prophylaxis against cytomegalovirus infection using intravenous immune globulin and gagiclovir in heart-lung transplant recipient. Presented and published at American College of Chest Physicians, 56<sup>th</sup> Annual Meeting, October 1990.
17. Letsou GV, West K, Hogan J, Lee P, Kim J, Condos S, Detmer W, Ariyan S, Dewar ML, Baldwin JC, Elefteriades JA. 180 and 360 nerve cuff electrodes are equally effective for stimulation of canine thoracodorsal nerve. Presented and published at 4<sup>th</sup> World Symposium on Transformed Skeletal Muscle for Cardiac Assist, October 1990.
18. Letsou GV, Hogan J, Detmer W, Condos S,l Lee P, Ariyan S, Dewar ML, Baldwin JC, Elefteriades JA. Optimal timing of skeletal muscle contraction for cardiac augmentation in the canine model. Presented and published at 4<sup>th</sup> World Symposium on Transformed Skeletal Muscle for Cardiac Assist, October 1990.
19. Pavalkis FJ, Dewar ML, Fayad PB, Brass LM: Effects of valvular heart disease on cerebral blood flow velocities. Presented at the Second World Congress of Stroke. Sept. 8-12, 1992, Washington

#### **EDITORIALS, REVIEWS, CHAPTERS, BOOKS**

1. Dewar ML, Chiu RC-J. Cardiomyoplasty and the pulse train simulator. In: Chiu RC-J (ed). Biomechanical Cardiac Assist – Cardiomyoplasty and Muscle Powered Devices. Futura Pu Co., 1986, pp. 43-58
2. Dewar ML. As the king lay dying: Surgery and the Renaissance in Paris. Ann Roy Coll Surg, March 1988.
3. Dionisopoulos T, Brandy P, Walsh G, Dewar M, Desrosiers C, Chiu RC-J. Cardiomyoplasty: The Interface Problem and the Growth Potential in Transformed

- Muscle for Cardiac Assist and Repair (Chiu RC-J, Bourgeosi I) Mt. Kisco, NY: Futura Publishing Co., Inc. 1990, pp 241.**
- 4. Dewar ML, Stark J. Complications of correction of total anomalous pulmonary venous connection. IN: Waldhausen J (Editor): Complications in Cardiac Surgery, Mossy, Inc., New York 1991, pp. 159-167.**
  - 5. Kopf GS, Dewar ML: Cardiovascular Surgery in the Newborn. Warshaw J, ed. In Principles and Practice of Pediatrics Philadelphia: Lippincott, 1992**
  - 6. Louie EK, Dewar ML, Ezekowitz M. Paradoxical Embolization, Diagnosis and Management. Ezekowitz M, ed. In Cardiac Sources of Systemic Embolization New York: Marcel Decker Purl. 1992**