

CURRICULUM VITAE

Date of Revision: July, 2013

Name: Michael Lawrence Dewar, M.D.

Appointment : Assistant Professor of Surgery (Cardiac)

Term: November 1, 2012 -June 30, 2015

School: Yale New Haven Hospital School of Medicine

Education: B.A. cum laude, Philosophy and History, Marquette University,
1968-1972
Pre-medical curriculum, Northeastern University
M.D. University of Massachusetts 1976-1980

Career/Academic Appointments::

1980- 1985 Resident, McGill University Coordinated Surgery Residency, Montreal, Quebec, Canada

1985- 1986 Research Canadian Heart Association Fellow, Montreal, Quebec, Canada

1986-1988 Chief Resident, McGill University Cardiothoracic Surgical Residency, Montreal, Quebec, Canada

1988-1989 Senior Registrar Hospital for Sick Children, Great Ormond Street, London, United Kingdom

1989-1993 Assistant Professor Yale University School of Medicine, Section of Cardiothoracic Surgery, New Haven, Connecticut

1991-1993 Chief, Section of Cardiothoracic Surgery, West Haven Veterans Medical Center, West Haven, Connecticut

1993- 2008 Attending Yale-New Haven Hospital Surgeon, New Haven, Connecticut
Hospital of Saint Raphael, New Haven, Connecticut
Danbury Hospital, Danbury, Connecticut

1996- 2012 Assistant Clinical Professor, Yale University School of Medicine
Department of Surgery (Cardiac)

11/2012 – present Assistant Professor of Surgery (Cardiac), Yale University School of Medicine

Administrative Positions: Director, International Cardiac Surgical Outreach Program, Bridgeport and Yale New Haven Hospital Heart and Vascular Center

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

2012 American Board of Thoracic Surgery recertification

Professional Honors and Recognition:

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
- 2005 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
- 2006-present President, The Almazov Foundation of North America
- 2011-present Gaurdian Board of the Healthy Heart Foundation, St Petersburg, Russia

Regional

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 "OPCAB 12 year experience" at Bridgeport Cardiology Conference 2013

International/National

1. "Options in Aortic Valve Surgery" to Pavlov State Medical University, St. Petersburg, Russia, September 2004
2. "Minimally Invasive Coronary Artery Surgery" to Federal Institute for Heart , Lung And Transfusion, St. Petersburg, Russia 2007.
3. "Mitral Valve Repair" at Grand Rounds, Regional Hospital Petrozavodsk, Russia 2013
4. Military Academy Hospital Grand Rounds, Petersburg, Russia 2013

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- 2011)

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 8th 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
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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 Thombocytopenia—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 Thombotic (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. 10th 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 38th 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, 56th 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 4th World Symposium on Transformed Skeletal Muscle for Cardiac Assist, October 1990.
 18. Letsou GV, Hogan J, Detmer W, Condos S, I 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 4th 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