

CURRICULUM VITAE

ELIAS J. AROUS, M.D., F.A.C.S.

OFFICE ADDRESS: UMass Memorial
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Worcester, MA 01605
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ACADEMIC APPOINTMENTS:

1/1/00	Professor of Surgery University of Mass Medical School
1988 – 1999	Associate Professor of Surgery University of Mass Medical School
1983 – 1988	Assistant Professor of Surgery University of Mass Medical School
1999 – Present	Clinical Instructor in Health Sciences, Bouvé College of Health Sciences, Northeastern University, Boston
7/03 - Present	Adjunct Clinical Professor in the Department of Physician Assistant Studies, School of Health Sciences, Massachusetts College of Pharmacy and Health Sciences, Boston

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CURRENT POSITION:

2/2007	Associate Chief Medical Officer UMass Memorial Healthcare
2/2002	Chief of Surgery, Memorial Campus Vice Chair, Department of Surgery, UMASS Memorial Healthcare Director, Vascular Lab, Memorial Campus
2/1999 – 1/2002	Chief, Department of Surgery Saint Vincent Hospital/Worcester Medical Center Worcester, MA 01604 Director, Vascular Lab
1991 – Present	Vice Chairman, Dept. of Surgery University of Massachusetts Medical School
1/2001 -	Councilor for Massachusetts Chapter of the American College of Surgeons
9/2000 -	Chairman, Board of Trustees, University of Balamand Foundation, Lebanon
12/2000 -	Member, International Advisory Board for the University of Balamand, Lebanon
1991 - 1999	Chief of Vascular Surgery Director of the Vascular Lab Vice Chairman, Department of Surgery Memorial Health Care Worcester, MA 01605 Vice Chairman, Board of Directors, Memorial Medical Group
1986 – 1991	Chief of Department of Surgery Worcester City Hospital

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1984 - 1986 -

Assistant Chief of Surgery
Worcester City Hospital

AWARDS:

American Heart Association - Recipient of Heart of Gold
Award for 2005 for Advancing the Mission of the
American Heart Association

Frederick J. McCready, M.D. Teacher of the Year, 2001,
2002 & 2003, University of Massachusetts Surgical
Residency Program

Teacher of the Year Award, 1989
University of Massachusetts Surgical Residency Program

Deterling Award of New England Vascular Society for best
paper, September 1999

Recipient of "Kulbankian" International
Award Lisbon, 1970,1971,1972,1973,1974,
as the top graduate of the university

The Top Graduate from Medical School, Syria, 1975

RESIDENCY, FELLOWSHIP

1975

Graduate - Aleppo Medical School, Syria, M.D.

1975 – 1976

Internship - Aleppo Medical School, Syria

1977 – 1981

Surgical Resident
University of Mass Coordinated
Surgical Residency Program
University of Mass Medical School
Worcester, MA 01655

July, 1981-
June, 1982

Chief Surgical Resident
University of Mass Surgical Residency Program
University of Mass Medical School

July, 1982 -
June, 1983

Vascular Surgery Fellowship
University of Mass Medical School

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LICENSURE:

Commonwealth of Massachusetts
February, 1979 #43803

BOARD EXAMINATION:

American Board of General Surgery I & II
October, 1983

American Board for Added Qualification
in Vascular Surgery, May 20, 1991

Re-certification of American Board of
General Surgery, 1991, 2001

Re-certification of American Board of Vascular Surgery, 10/16/1998

American Registry for Diagnostic Medical Sonography,
Registered Vascular Technologist "RVT" 1993

MEMBERSHIP:

American College of Surgeons, Fellow

New England Society for Vascular Surgery – Vice President

New England Surgical Society

American Association for Vascular Surgery

Society for Clinical Vascular Surgery

Society for Vascular Biology

Society for Vascular Tech

American Heart Association

Association for Surgical Education

Mass. Chapter, American College of Surgeons

International College of Surgeons, Fellow

Society for Vascular Surgery

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COMMITTEES:

Memorial/Hahnemann OR Committee Chair

UMass/Memorial OR Committee

Patient Care Assessment Committee

Surgical Education Committee

Surgery Performance Improvement Committee

Reappointment/Surgical Privileges Committee

Program Director for Endovascular Workshop for New
England Society for Vascular Surgery, Year 2000,
2001, 2002, 2003

Member, Board of Trustees, Worcester Medical Center,
Worcester, MA, 1/2000 to 2/2002

Member, Board of Trustees, St. George's Cathedral,
Worcester, MA, 2000, 2001

Chairman of American Heart Association Heart Ball for
Central Massachusetts, 2003 – 2004

Member, Board of Trustees, Balamand University, Lebanon

Chairman, University of Balamand Foundation, 2002, 2003,
2004

Member, Board of Trustees, UMass Memorial Medical
Group, 12/2003

Member, Board of Trustees, Marlboro Hospital, 3/2004

BIBLIOGRAPHY:

1. EJ Arous, P Baum, BS Cutler: "The Ischemic Exercise Test, Implications of Management". Arch. Surg., July 1984 119, 780-783
2. P Cardullo, HB Wheeler, BS Cutler, EJ Arous, J Herrmann: "Accuracy of Duplex Scanning in the Detection of Carotid Artery Disease". Bruit, 1984 Vol 8 181-186
3. EJ Arous, BS Cutler: "Persistent Hypoglossal Artery". Bruit, July 1985 Vol 9 173-174
4. R Fiddian-Green, P Amelin, B Cutler, J Herrmann, E Arous, M Sheidler, HB Wheeler: "Predication of the Development of Sigmoid Ischemia on the Day of Aortic Surgery from Indirect Measurements of Intramural PH in the Colon". Arch. Surg. 121, 654-660, 1986
5. R Fiddian-Green, P Amelin, E Arous, S Baker, B Cutler, J Herrmann, T Marsicano, T Vandersalm, HB Wheeler: "Gut Ischemia, Predictive Value of Transient Episodes of Gut Ischemia for Sepsis, Multisystem Failure and Death after Cardiovascular Surgery". Gastroenterology, 1986 90 "5" 1414-1416
6. J Castle, E Arous: "Femoral Vein aneurysm", J. of Cardiovascular surgery. Vol 3, No, pp 317-319, June 1995
7. D Adams, K Saia, K Holbrook, E Arous. Common Carotid Intimal flap following Carotid Endarterectomy. J. Vas. Tech. Vol 19, 185-186. July, 95
8. C Messa, M Kulkarni, E Arous. "Double Mycotic Aneurysms" J. of Cardiovascular Surgery. Vol 3, No 6 pp 687-692 Dec. 95
9. North American Symptomatic Carotid Endarterectomy Trial (NASCET) results. Principal investigator in the NIH trial at Medical Center of Central Mass. "Benefit of Carotid Endarterectomy in Patients with Symptomatic Moderate or Severe Stenosis." New England Journal of Medicine, Vol. 339, No. 20, 11/12/98
10. R Ricciardi, A Vernadakis, K Saia, E Arous. Incidence of Significant carotid stenosis in different diagnostic groups. J. Vas. Tech. Oct. 1998
11. Low dose and high dose acetylsalicylic acid for patients undergoing carotid endarterectomy, a randomized controlled trial, Lancet Vol. 353, June 26, 1999, 2179-94 (P.I)
12. W Tamim, E Arous. Thrombolytic therapy, the treatment of choice for iliac vein thrombosis in the presence of kidney transplant. Annals of Surgery July 1999

13. La Thrombolyse, Traitement de Choix de la Thrombose Veineuse Iliaque chez le Transplanté Rénal. W Tamim, EJ Arous. *Ann Chir Vasc* 1999;13:436-448
14. Endovascular-assisted versus conventional in situ saphenous vein bypass grafting: Cumulative patency, limb salvage and cost results in a 39-month multi-center study. D Rosenthal, A. Arous, S. Friedman, et al. *J. Vasc Surg.* Vol. 31, Number 1, Part 1:60-68, January, 2000
15. WZ Tamim, MD, EJ Arbid, MD,LS Andrews, RVT, EJ Arous, MD. Percutaneous Induced Thrombosis of Iatrogenic Femoral Pseudoaneurysms following Catheterization. *Ann of Vasc Surg*, Vol 14:254-259, No. 3, May, 2000
16. EJ Arous, MD, PR Nelson, MD, SM Yood, MD, MPH, JJ Kelly, MD, A Sandor, MD, DEM Litwin, MD. Hand-Assisted Laparoscopic Aortobifemoral Bypass. *J. of Vasc Surg*; Vol 31, No 6:1142-8, June, 2000
17. Litwin DE, Darzi A, Jakimowicz J, Kelly JJ, Arvidsson D, Hansen P, Callery MP, Denis R, Fowler DL, Medich DS, O'Reilly MJ, Atlas H, Himpens JM, Swanstrom LL, Arous EJ, Pattyn P, Yood SM, Ricciardi R, Sandor A, Meyers WC. Hand-assisted laparoscopic surgery (HALS) with the Hand Port system: Initial experience with 68 patients. *Ann Surg* 2000;231:715-23.
18. EJ Arous, PR Nelson. Endovascular in Situ Bypass Decreases Morbidity and Hospital Stay Following Infrainguinal Arterial Reconstruction. *J. Endovasc Ther* 7:309-314, August, 2000
19. EJ Arous, R Ricciardi, AJ Vernadakis, RB Claytor, AJ Duffy, SP Baker. Atherosclerosis Risk Factors and the Carotid Duplex Scan. *Jrnl of Vasc Tech*, 24(4):211-215, 2000
20. EJ Arous, MD, K Gallagher, K Kercher, MD, JJ Kelly, MD, D Litwin, MD. Hand-assisted Laparoscopic Aortobifemoral Bypass Versus Open Bypass for Occlusive Disease. *Jrnl Laparoendoscopic & Adv Surg Tech*, October, 2002
21. EJ Arous, MD, S Islam, MD, M Zayaruzny, MD, B Alsoufi, MD, L Andrews, RVT. Venous Duplex in the Intensive Care Unit: Misuse, Overuse or Both? *Jrnl of Vasc Tech*, 26(4):280-282,2002
22. MH Eslami, MD, M Zayaruzny, MD, M Rohrer, MD, EJ Arous, MD, BS Cutler, MD. Socioeconomic Factors that Adversely Affect the Rate of Amputation in Patients Presenting with Lower Extremity Ischemia: The Effects of Race, Insurance Status and Low Income. *The Journal of Vascular Surgery*, submitted for publication September 2005.

23. H Cui, MD, S Hao, MD, E Arous, MD. A Distinct Cause of Necrotizing Fasciitis: *Aeromonas veronii* Biovar Sobria. *Surgical Infections*, Vol 8, Number 5, 2007.
24. E Arous, MD, A Schanzer, MD, MH Eslami, MD, L Messina, MD. Endovascular Treatment of Ruptured Abdominal Aortic Aneurysms in the United States (2001-2006): A Significant Survival Benefit Over Open Repair is Independently Associated with Increased Institutional Volume. Accepted for publication November 2008.
25. E Arous, MD, A Schanzer, MD, MH Eslami, MD, L Messina, MD, R Steppacher, MD, M Belkin, MD. Vascular Surgery Training Trends from 2001-2007: A Substantial Increase in Total Procedure Volume. Accepted for publication December 2008. *The Journal of Vascular Surgery*.

BOOK REVIEWS

1. *Vascular Access for Hemodialysis, VII*. M.L. Henry, Chicago 2001; Bonus Books. *J. of Vasc. Surg*, February 2002

PEER REVIEW MANUSCRIPTS

1. Treatment of Infrarenal Aortic Aneurysm by Minimally Invasive Approach: Interest of a Video Assisted Technique. *Journal of Vascular Surgery*, February 2003
2. Laparoscopy-Assisted Abdominal Aortic Aneurysm Repair: Early and Middle Term Results of a Consecutive Series of 122 Cases. *Journal of Vascular Surgery*, August 2005

ABSTRACTS & POSTERS

1. RI Shopnick, J Reilly, E Arous, DB Brettler, Anti-cardiolipin antibody and activated protein C resistance in patients with severe PVD. Abstract presented at the American Society of Hematology, Dec. 1-5, 1995
2. Urokinase is the treatment of choice for DVT with renal Allograft" Poster at Society of Vascular Technology San Francisco 1997
3. "Vascular Lab findings in Klippel Trenauny Syndrome" Poster at Society of Vascular Technology San Francisco 1997

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4. Role of Angioscopy in Vascular Surgery. Abstract. Presented at the Meeting, Damascus, Syria Arab Heart Association Meeting, 5/98, Damascus, Syria
5. Carotid Endarterectomy without Angiography. Abstract. Presented at the Arab Heart Association Meeting, 5/98, Damascus, Syria
6. Endovascular femoro distal bypass graft decreases Morbidity and hospital stay. Abstract. Presented at New England Vascular Society Meeting 9/30/99
7. Hand-assisted laparoscopic aortobifemoral bypass grafting. P Nelson, S Yood, J Kelly, A Sandor, D Litwin, E Arous. Abstract presented at New England Society of Vascular Surgery, Sept. 99
8. Cost advantage of endovascular in situ saphenous vein bypass abstract presented at New England Vascular Society, 10/1/99
9. Hand-assisted laparoscopic aortobifemoral bypass grafting abstract presented at American College of Surgeons meeting in San Francisco, October 11, 1999. Motion picture
10. L Andrews, EJ Arous. Saphenous Vein Mapping for Endovascular Side Branch Occlusion. Poster at Society of Vas. Tech., August 2000
11. W Nasr, K Sims, EJ Arous. Angioscopically-assisted In Situ Infringuinal Bypass Grafts Have Improved Patency Compared to the Traditional In Situ Grafting. National Arab Medical Association, Aleppo, Syria, 7/1 – 7/6/07.
12. MH Eslami, JJ Kelly, D Czerniach, RG Ciocca, EJ Arous. Video Presentation of the First Totally Laparoscopic Aortobifem Bypass Graft in the New England Area for Severe Aortoiliac Occlusive Disease. New England Society for Vascular Surgery, Ledyard, CT 10/5 – 10/7/07.

NEWSPAPER ARTICLES:

1. Worcester Telegram & Gazette, July 12, 1999. “A Better Bypass for Threatened Limbs”
2. Worcester Telegram & Gazette, December 27, 1999. “Physicians’ Forecast Future of Vascular Surgery in the 21st Century”
3. Worcester Telegram & Gazette, January 2000. “Minimally Invasive Aortic Surgery”
4. Boston Globe, 2/15/05. Quoted on the “Indications for Abdominal Aortic Aneurysm Screening”

PRESENTATIONS:

1. EJ Arous, P Baum, BS Cutler: "The Ischemic Exercise Test, Implications of Management". Presented at the New England Vascular Society Meeting, Bretton Woods, NJ, Sept. 1983
2. CS Norris, EJ Arous, HB Wheeler: "Postoperative Measurement of Blood Flow in Saphenous Vein Femoropopliteal and Femoro-tibial Bypass Grafts". Abstract presented at the American College of Surgeons. Massachusetts Chapter, Newton, MA Dec. 1983
3. P Cardullo, BS Cutler, HB Wheeler, EJ Arous: "Accuracy of Duplex Scanning in the Detection of Carotid Artery Disease". Abstract presented at 1983 Society of Non-invasive Vascular Technology, SF
4. Organ Procurement and kidney salvage for transplants, Surgical Grand Rounds. U-Mass Medical Center, Worcester, MA, Dec. 90
5. The national trend in carotid surgery. Surgical Grand Rounds, UMASS Medical Center, Worcester, MA, March, 92
6. Carotid Endarterectomy status at MCCM Combined Grand Rounds, April 1993
7. E Arous, AV Fistulae in renal dialysis, Central Mass Renal Symposium, March, 1994
8. Abdominal Aortic Aneurysms, risks and trends over the past 5 years. Combined Grand Rounds, MCCM, Worcester, MA, March, 94
9. RI Shopnick, DB Brettler, E Arous, the Incidence of Antithrombin III Deficiency in Patients undergoing Revascularization of Peripheral Arterial Disease, abstract presented at Congress of International Society on Thrombosis and Hemostasis. 1995
10. E Arous, "The Changing Face of Carotid Endarterectomy in 1995", presented at the Greater Boston Vascular Technologies Society, Oct, 1995
11. Current Status of Carotid Endarterectomy, Symposium on "Atherosclerosis", held by Society of Cardiovascular Surgery. Lattakia Syria. May 7, 8, 1997
12. Visiting Professor at University of Damascus Medical School. May 14, 1997
13. Visiting Professor at St. Louis Hospital. University of Aleppo Medical School, Syria. May 5, 1997

14. Appropriateness of Carotid Duplex Scanning. Greater Boston Vascular Technologist Meeting, April, 1997
 15. Criteria of Carotid Duplex Scan for endarterectomy without angiography. Greater Boston Vascular Technologist Meeting, April, 1997
 16. Role of Angioscopy in Peripheral Vascular Surgery. Presented at the Syrian Cardiovascular Conference. Damascus, May, 1998
 17. Carotid Endarterectomy without angiography. Presented at the 2nd ARAB Heart Association meeting. Damascus, May, 1998
 18. Prevention of Stroke in 1998. Combined Grand Rounds. National University of Tucuman, Argentina Aug. 1998
 19. Visiting Professor, University of Tucuman, Argentina, The Changing face of Carotid Surgery, Aug. 24, 1998
 20. Endovascular in situ femoro distal bypass graft decreases morbidity and hospital stay. Presented at New England Society of Vascular Surgery. Sept. 25, 1998
 21. Mesenteric ischemia panel discussion at New England Surgical Society. Sept. 26, 1998
 22. The Ischemic Extremity. Symposium on Vascular Rehabilitation. Whittier Rehab Ctr. Westboro, Oct. 23, 1998
 23. The Endovascular approach to distal bypass surgery. Combined Grand Rounds. Memorial Health Care. Nov. 1998
 24. Endovascular revascularization of lower extremity (a multi-center trial). Interhospital Grand Rounds, Saint Vincent Hospital, April, 1999
 25. E Arous, D Rosenthal, SG Friedman, MD Ingegno, LW Kraiss, JD Martin, G Piano, EE Rigdon, SR Self. Endovascular versus conventional in situ saphenous vein bypass, cumulative patency, limb salvage and cost results in after 39 months of a multi-center study. Society of Vasc. Surg/ISCVS, June 8, 1999
 26. Endovascular course preceptor at N. E. Vascular Society meeting, Chatham, October 1, 1999
 27. Laparoscopic vs. Endovascular Approach to Aortic Surgery. Biomedical Engineering & Minimally Invasive Surgery Symposium. UMASS Endosurgery Conference, April 6, 2000
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28. Minimally Invasive Vascular Surgery at the Mediterranean Cardiovascular Meeting in Balamand University, Beirut, Lebanon, August 2, 2000
29. Open versus endovascular femoro distal bypass graft. Presented at New England Vascular Society, Boston, MA, October 4, 2000
30. Endovascular insitu bypass graft. Presented at the Harvard Vascular Symposium, Boston, MA, May, 2001
31. Update on Endovascular Surgery. Presented at Surgical Grand Rounds, UMASS Medical Center, May 23, 2001
32. IVC Filters. New England Society for Vascular Surgery Endovascular Workshop, Providence, RI, September 19, 2001
33. Thrombin Obliteration of Femoral Pseudoaneurysm, New England Society for Vascular Surgery Ultrasound Workshop, Rockport, ME, October 4, 2002.
34. Thrombin Obliteration of Femoral Pseudoaneurysm, Vascular Technologist Conference, Worcester Medical Center, October 26, 2002.
35. How Do I Do In Situ Bypass. New Frontiers in Vascular & Endovascular Surgery, Harvard Vascular Symposium, Boston, MA, May 10, 2003
36. Femoral Pseudoaneurysm Thrombin Injection. Post-Graduate Course at NESVS Annual Meeting, Stowe, VT, September 16, 2005
37. Carotid Endarterectomy. Department of Neurology Grand Rounds. UMass Memorial Health Care, December 13, 2005
38. Endovascular insitu bypass graft. Presented at the Harvard Vascular Symposium, Boston, MA, May, 2006
39. Disease & Updated Treatment of Cerebrovascular Disease: Carotid Endarterectomy. Presented at the 18th Annual Frontiers in Critical Care Nursing, Worcester, MA, May 2007.
40. Endovascular insitu bypass graft. NAAMA. Syria, July 2007

41. MH Eslami, JJ Kelly, D Czerniach, RG Ciocca, EJ Arous. Video Presentation of the First Totally Laparoscopic Aortobifem Bypass Graft in the New England Area for Severe Aortoiliac Occlusive Disease. New England Society for Vascular Surgery, Ledyard, CT 10/5 – 10/7/07.
42. EJ Arous. “New Horizons in Vascular Surgery,” International Medical Conference, University of Aleppo, Syria May 4 – 8, 2008.
43. EJ Arous. How I do Femoro Distal Bypass Graft. Harvard Symposium - Contemporary Management of Vascular Disease, Boston, MA May 10, 2008.
44. E Arous, M Eslami, L Messina, A Schanzer, J McPhee. Endovascular Treatment of Ruptured Abdominal Aortic Aneurysms in the United States (2001 – 2006): A Significant Survival Benefit over Open Repair is Independently Associated with Increased Institutional Elective Volume. New England Society for Vascular Surgery, Newport, RI 10/3 – 10/5/08
45. M Eslami, N Czikesz, A Schanzer, L Messina, E Arous. Peripheral Arterial Interventions: Trends in Market Share and Outcomes by Specialty 1998 – 2005. New England Society for Vascular Surgery, Newport, RI 10/3 – 10/5/08.
46. E Arous, MD, N Csikesz, BA, MH Eslami, MD, LM Messina, MD, A Schanzer, MD. An Analysis of 4001 Carotid Artery Stenting Procedures Performed in New York and Florida (2005 -2006): Procedure, Indication, Stroke Rate and Mortality are Equivalent for Vascular Surgeons and Non-Vascular Surgeons. Society for Clinical Vascular Surgery, Ft. Lauderdale, FL 3/18 – 3/21/009.

RESEARCH INTERESTS:

1. Clinical research comparing the Efficacy of Ticarcillin/Clavulanic Acid in the Treatment of the Intra-Infections vs. Gentamycin/Clindamycin Therapy.
2. Improvement of the Patency of the "FTFE" Grafts with Anti-thromboxane, in the Comparison to Aspirin and Control Groups. (Research in Dogs).
3. Modifying lipid oxidation to decrease in vitro LDL uptake using double layer cell culture of endothelial and smooth muscle cells of bovine aorta.
4. North American Symptomatic Carotid A. Endarterectomy trial (NASCET) comparing Surgical vs. Medical treatments, NIH study, principal investigator. Completed 2/98.

5. Detection of lupus anticoagulant, cardiolipin and APA in patients undergoing peripheral vascular reconstruction, ongoing project. Completed 2/99.
6. Aspirin and Carotid Endarterectomy Trial (ACE), principal investigator in this NIH trial to find the appropriate dose of aspirin following Carotid Endarterectomy.
7. Endovascular repair of abdominal aortic aneurysms using stented grafts in pigs model.

GRANTS

1. Baxter Co. Study the benefits of using side branch Angioscopy in femoropopliteal bypass grafts, \$15,000 (1999).
2. Edwards Lifesciences LLC. Cost effectiveness of endovascular lower extremity revascularization compared to standard bypass grafts. \$12,000 (2002-2004).

PANEL DISCUSSIONS

1. Vascular Surgery Advisory Board for Thrombolysis. Santa Monica, CA 5/15 – 5/18/03.