

(Revised 9/30/2004)

CURRICULUM VITAE
 Bauer E. Sumpio, M.D., Ph.D.
 Professor & Vice-Chairman of Surgery
 Professor of Radiology
 Chief, Vascular Surgery Section

Business Address: Department of Surgery
 Yale University School of Medicine
 333 Cedar Street, FMB 137
 New Haven, CT 06510
 (203) 785-2561

Present Departmental Appointments: Chief, Section of Vascular Surgery (1995-)
 Vice-Chairman of Surgery for Affiliated Programs (1993-)
 Program Director, Vascular Surgery (1995-)
 Program Director, General Surgery Residency (1993-1995)

Present Institutional Appointment: Professor of Surgery (Tenured 1994)

Present Hospital Appointments: Attending Surgeon
 Yale-New Haven Hospital

Staff Surgeon
 West Haven VA Medical Center

Courtesy Attending Staff
 Bridgeport Hospital

Institutional Appointments: Professor of Surgery (Tenure) 1994-
 Yale University School of Medicine
 New Haven, CT 06510

Associate Professor of Surgery (Tenure) 1993-1994
 Yale University School of Medicine
 New Haven, CT 06510

Associate Professor of Surgery (Term) 1990-1993
 Yale University School of Medicine

New Haven, CT 06510

Assistant Professor of Surgery 1987-1990
 Yale University School of Medicine
 New Haven, CT 06510

Hospital
 Appointments:

Attending Surgeon 1987-
 Yale-New Haven Hospital
 20 York Street
 New Haven, CT 06510

Chief, Vascular Surgery Service 1987-1994
 VA Medical Center
 West Spring Street
 West Haven, CT 06516

Courtesy Attending Staff 1991-
 Bridgeport Hospital
 Grant Street
 Bridgeport, CT

Institutional Appointments:

Dean's Space Policy Committee 1993-97
 Dean's Scholar's Committee 1993-97
 Associate Director, Graduate Medical 1996-
 Education
 Physician's Assistant Dean Liaison 2001-

Departmental Appointments:

Vice-Chairman for Affiliated Programs	1995-
Associate Program Director, Surgery	1995-99
Program Director, Surgery	1993-95
Medical Students Thesis Committee Chairman	1988-95 1990-95
Ohse Grant Review Committee	1988-95

Certification:

Diplomate National Board of Medical Examiners Certificate No. 211372	1982
Diplomate American Board of Surgery Certificate No. 33700 (Recertified)	1988 1998
Special Qualifications in Vascular Surgery No. 100178 (Recertified)	1990 1997

Fellowship:

Fellow, American College of Surgeons	1988
Fellow, American College of Cardiology	1992
Fellow, International College of Angiology	1992
Fellow, American Heart Association	1993
Fellow (Honorary), Philippine College Of Surgeons	2002

Licensure

Connecticut No. 024918	1982
North Carolina No. 30242	1986

Education and
Postgraduate Activity:

Univ. of North Carolina Chapel Hill, North Carolina	Vascular Fellowship	1986-87
Yale University School of Medicine New Haven, Connecticut	Straight General Surgical Residency	1981-86
Cornell University Medical M.D. New York, New York	Ph.D. (Physiology)	1980 1981
Johns Hopkins University Baltimore, Maryland	B.A. (Chemistry) M.A. (Physical Chem.)	1974 1974

Awards and Honors:

Honorary Fellow, Philippine College of Surgeons	2002
America's Best Doctor	20001,2002,2003, 2004
Best Doctors in New York	2000, 2001, 2002
Top Docs in Connecticut	2001, 2002, 2004
Research Achievement Award from International College Of Angiology	2000
American College of Surgeons Travelling Fellowship (Australia and New Zealand Chapter)	1996
E. J. Wylie Travelling Scholar in Vascular Surgery	1990-91
Schering Scholarship Award, American College of Surgeons,	1985-86
Runnerup - Young Investigators Award, Shock Society,	1983

Patents Awarded:

Patent # 5,354,774 (awarded 10/11/94) and Patent # 5,514,707 (awarded 5/7/96)

"Inhibition of smooth muscle cell proliferation by 8-methoxypsoralen photoactivated by visible light."

Research Projects and Grants:

Present

1. NIH R01 HL 47345-08 (P.I., Funding period: 4/01/03-3/31/08, \$1,250,000) "Mechanisms by which EC sense changes in hemodynamics". This grant has been funded since 1991.

2. VA Merit Review (P.I., Funding Period 10/03-9/08, \$750,000) "Regulation of growth factor production by stretched endothelial cells". This grant has been continuously funded since 1990.

Previous

1. American Heart Association (National Affiliate) (P.I., Funding Period 7/94-6/97, \$120,000) "Characterization of cyclic strain promoter elements"

2. Merck Grant (P.I., Funding period: 12/88-12/94, \$60,000) "FK-506 toxicity in the kidney"

3. Illumenex Grant (P.I., Funding Period: 2/93-6/94, \$120,000) "Psoralen phototherapy for treatment of restenosis)

4. NIH R29 HL 40305 (P.I., Funding period: 04/88-03/93, \$350,000) "Effect of mechanical stress on vascular cells in culture"

5. Whitaker Foundation (P.I., Funding period: 3/89-2/92, \$180,000) "Mechanical deformation of endothelial cells grown on different biomaterials and surfaces."

6. American Heart Association, Connecticut Affiliate (P.I., Funding Period: 7/89-6/91, \$ 63,000) "Growth of endothelial cells and smooth muscle cells in a pulsatile environment"

7. VA Research Advisory Group 001 (P.I., Funding period: 10/88-9/90, \$58,000) "Repetitive mechanical stretching of vascular cells in culture"

8. Biomedical Research Support Grant RR0358 (P.I., Funding period: 1/26/88-1/25/89, \$8,500) "The effects of rheology on organ function"

By Members of the laboratory

1. VA Merit Review Grant (P.I. Vivian Gahtan, M.D., 1999-2002, \$152,900)
"The Mechanism of Thrombospondin-1 Induced Chemotaxis"
2. American Heart Association, Heritage Affiliate (P.I. Vivian Gahtan, M.D., 1999-2002)
"The role of platelet derived growth factor in thrombospondin-1 induced smooth muscle cell chemotaxis".
3. Council for Tobacco Research (P.I. Wei Du, M.D., 1994-1997, \$150,000)
"Characterization of cyclic strain promoter elements in endothelial cells"
4. American Heart Association, (CT Affiliate) (P.I. Ira Mills, Ph.D., 1992-1994, \$80,000)"Mechanical Signalling in Vascular Endothelial Cells"
3. NASA RFA (P.I. Ira Mills, Funding period: 10/95-9/98, \$266,635) "Are G-proteins mechanosensors for endothelial cells?"

By Trainees in the laboratory

1. NIH NRSA 1 F32 HL08674 (1993-1995)
"PKC Activity in EC Subjected to Cyclic Stretch"
Leigh V. Evans, M.D.
2. NIH NRSA 1 F32 HL08675 (1992-1994)
"EDRF production by EC subjected to cyclic strain"
Mark Awolesi, M.D.
3. NIH NRSA IF32HL 08245-01 (1991-1993)
"Modulation of SMC contractility by cyclic stretch of EC"
Mark D. Widmann, M.D.
4. International Society for Cardiovascular Surgery, Student Research Fellowship (1991-92) "Activation of protein kinase C in endothelial cells by cyclic stretch"
Tae Shin, YMS III ('93)

5. American Heart Association, CT Affiliate, Fellowship (1990-91)
"Signal Transduction of Cyclic Stretch to Endothelial Cells"
Oscar Rosales, M.D.
6. International Society for Cardiovascular Surgery, Student Research Fellowship
(1990-91) "Production of PDGF by Vascular Cells Subjected to Cyclic Strain"
Robert Spillane, YMS III ('91)
7. International Society for Cardiovascular Surgery, Student Research Fellowship
(1993-94) "Modulation of endothelial cell phenotype by ambient pressure"
Joseph Ricotta
7. International Society for Cardiovascular Surgery, Student Research Fellowship
(1994-95) "Diacylglycerol formation in vascular endothelial cells"
Lyubov Frenkel
7. International Society for Cardiovascular Surgery, Student Research Fellowship
(1994-95) "Photochemotherapy with 8-methoxypsoralen"
David Lee, YMS II ('96)

Clinical Trials:

1. Prospective, randomized, multicenter evaluation of Distaflo ePTFE bypass graft in lower extremity applications. IMPRA corporation (PI: Bauer Sumpio, MD. PhD)
2. Clinical evaluation of Regranex (beclapermin) Gel 0.01% for the treatment of full-thickness diabetic neuropathic foot ulcers. Ortho-McNeil Pharmaceuticals. (PI: Bauer Sumpio, M.D., Ph.D.)
3. Twelve-week randomized, double-blind multicenter study of the safety and efficacy of three oral doses of OPC-28326 versus placebo treatment in patients with intermittent claudication secondary to peripheral arterial disease. Otsuka America Pharmaceuticals (PI: Bauer Sumpio, MD, PhD).
4. Clinical evaluation of Regranex (beclapermin) gel 0.01% for preparing the wound bed and shortening the time interval to split-thickness skin grafting and complete wound coverage. Ortho-McNeil Pharmaceuticals. (PI: Bauer Sumpio, M.D., Ph.D.)
5. A multicenter, randomized, open-label study comparing the efficacy and safety of once daily ORG 31540/SR90107A versus adjusted-dose intravenous unfractionated heparin in the initial treatment of acute symptomatic pulmonary embolism. "Matisse Study" Organon (PI: Bauer Sumpio, M.D., Ph.D.)

6. Safety, pharmacokinetics and pharmacodynamics of novel acting thrombolytic for initial treatment of chronic peripheral arterial occlusion. Amgen (PI: Bauer Sumpio, M.D., Ph.D.)
7. A double-blind, efficacy and safety study of the direct thrombin inhibitor, H376/95, versus standard therapy [enoxaparin and warfarin(coumadin)] in patients with acute, symptomatic deep venous thrombosis with or without pulmonary embolism. AstraZeneca (PI: Bauer Sumpio, M.D., Ph.D.)
8. Linezolid vs Aminopenicillins for Diabetic Foot Infections; Phase IV Clinical Trial for Linezolid,Zyvox,76-inf-0026-113. Pharmacia Corporation (PI: Peter Blume, DPM)
9. A Randomized,DoubleBlinded,Parallel-Group,Placebo-Controlled,Milutcenter study to Evaluate the Efficacy and Safety of Repifermin KGF-2 in Subjects with Venous Ulcers Protocol KGF-2-WHO4 Human Genome Sciences (PI: Bauer Sumpio, M.D., Ph.D.)
10. Comparison of Skin Perfusion Pressure, Transcutaneous Oxygen Pressure, and ABI,Determine whether SPP measurements may be better than tcPO2 and ABI for evaluation of lower limb ischemia in patients with chronic wounds Vasamedics Corporation,(PI: Bauer Sumpio, M.D., Ph.D.)
11. Multi-center, Open Label,Pilot Evaluation of the Tolerability, Efficacy and Safety of Oral Heparin/SNAC Solution Protocol No. 325A-C-004,Emisphere Technologies,Inc. PI: Peter Blume, DPM)
12. A Double Blind ,Placebo Controlled, Parallel Group Study of the Effects of Zoniporide on Perioperative Cardiac Events in High Risk Subjects Undergoing Noncardiac Vascular Surgery Zoniporide Protocol A3181007Pfizer , Inc. (PI: Bauer Sumpio, M.D., Ph.D.)

Fellows, residents and medical students trained:

George Letsou, M.D.	1988-89
Toshiaki Iba, M.D.	1989-91
Oscar Rosales, M.D.	1989-91
Mark Widmann, M.D.	1989-92
Wei Du, M.D.	1991-97
Richard Cohen, M.D.	1991-93
Collen Brophy, M.D.	1991-92
Robert Spillane, M.D. (YMS)	1990-91
Tae Shin, M.D. (YMS)	1990-93
Tooyoki Sonada, M.D. (YMS)	1990-93
Leigh V. Evans, M.D.	1992-94
Mark A. Awolesi, M.D.	1992-94
Makoto Watase, M.D., Ph.D.	1992-94
Guangdi Li, M.D.	1992-96
Wei jun Xu	1992-94

Charles Dow, M.D.	1992-93
Gary Gallagher, M.D.	1993-95
David Lee, YMS II	1993-96
Daniel Lee, YMS II	1993-96
Joseph Ricotta, B.S.	1992-94
Jason Koo, M.D.	1994-97
Xuijie Wang, M.D.	1994-99
Chrys Delling, YMS	1995-97
Peter Segurola, M.D.	1995-97
Henry Chen, YMSII	1995-98
Babuwole Oluwole, M.D.	1994-96
Yoshiko Yano, M.D.	1994-96
Masasahi Inaba, M.D.	1996-97
Masataka Ikeda, M.D.	1996-98
Hiroyuki Kito, M.D.	1996-99
Emery Chen	1997-99
Daniel Dudrick	1995-97
Nobuyoshi Azuma, M.D.	1997-99
Rosa Solis, M.D.	1997-98
Sukru Aydin Duzgun, M.D.	1997-99
James Smith	1998-99
Hope Rasque, M.D.	1998-99
Allerick Willis, M.D.	1998-2000
Robert Knox, M.D.	1998-2000
Spiros Frangos, M.D.	1998-2000
Kentaro Fujioka, M.D.	1998-1999
Hirata, Satoshi, M.D.	1999-2000
Gabriel DiLuozzo, M.D.	1999-2000
Shoichi Fuse, M.D.	1999-2000
Yamashita, Akimasa M.D.	1999-2002
Alan Chen, M.D.	1999-2001
Susan Nesselroth, M.D.	1999-2001
Nobu Akasaka, M.D.	1999-2000
Ajay Dhadwall, MBBS	1999-2001
Seichi Yamaguchi, M.D.	1999-2001
Haga Masae, M.D.	2000-2002
Sangseob Yun, M.D.	2000-2002
Tae Sung Lee, M.D.	2000-2003
Quan Hai Chen, M.D.	2000-2003
Sanjeev Pradhan, M.D.	2001-2003
Yannis Kakisis, M.D.	2001-2003
Xiu-jie Wang, M.D.	2002-2003
Hidenori Asada, M.D.	2002-2004
Kengo Nishimura, M.D.	2003-
Yuji Hoshino, M.D.	2003-
LaScenya Jackson, M.D.	2003-2004

Committee Membership

Yale University School of Medicine:

Dean's Space Committee	1993-97
Scholars Awards Committee	1993-97
Physicians Assistant Steering Committee	1997-

Yale-New Haven Hospital:

Infection Control Committee	1987-92
Clinical Research Center Committee	1993-95
Credentials Committee	2003-
Graduate Medical Education Vice Chairman	

West Haven VA Medical Center:

CPR Committee	1987-92
Nutrition Committee	1987-92
Blood bank Committee	1987-90
Medical Student Clerkship Liason	1987-93

Society membership:

American Surgical Association	1998
International College of Angiology	1993
New England Surgical Society	1993
Society for Vascular Surgery (Fellow)	1991
American College of Cardiology (Fellow)	1991
Society for Vascular Medicine and Biology	1990
American College of Surgeons (Fellow)	1990
International Society for Cardiovascular Surgery	1990
New England Society for Vascular Surgery	1990
Eastern Vascular Society	1990
Society for University Surgeons	1990
Surgical Biology Club III	1989
Peripheral Vascular Surgery Society	1989
European Society for Vascular Surgery	1989
Biomedical Engineering Society	1989
American Heart Association	1988
Arteriosclerosis Council (Fellow)	
Basic Science Council	
Cardiovascular Surgery Council	
American Society for Cell Biology	1988
American Society for Surgical Research	1988
Connecticut Society American Board of Surgeons	1987
American Federation of Clinical Research	1985
Association of Academic Surgeons	1985

American Society of Nephrology	1984
Shock Society	1984
American Physiological Society	1983
New York Academy of Science	
National Association of VA Physicians	
Sigma Xi (Yale Chapter)	
American Association for the Advancement of Science	

Society Committees:

Chairman, Research Council, Society for Vascular Surgery (2003-2005)
 Secretary, Association for Program Directors in Vascular Surgery (2003-)
 Program Committee- Association of Academic Surgeons (1990-92)
 Program Committee- New England Society for Vascular Surgery (1992-1995)
 Program Committee- Society of University Surgeons (1993-1995)
 Program Committee- Peripheral Vascular Surgery Society (1993-1996)
 Arterial Wall Biology Committee- Association of Program Directors in General
 Vascular Surgery (1994)
 Committee on Fundamental Problems in Surgery-American College of Surgeons
 (1994-2002)
 Advisory Council for Vascular Surgery-American College of Surgeons (1994-2002)
 Program Chairman, CT Chapter, American College of Surgeons and Connecticut Society
 of American Board of Surgery (1996-1998)
 President Elect, Connecticut Society of American Board of Surgery (1997)
 Membership Committee- New England Society for Vascular Surgery (1998-2003)
 President, Connecticut Chapter, American College of Surgeons (1999)
 Education Committee- Association of Program Directors in General Vascular Surgery
 (1999-2001)
 Secretary, International College of Angiology (1999-2001)
 Executive Council, Association for Program Directors in Vascular Surgery (2000-)

Study Section:

Member Surgery and Bioengineering Study Section, National Institutes of Health
 (July 1, 1993 - June 30, 1997)
 Member Surgery Study Section, Veterans Administration (October 1, 1991-June 30,
 Chairman Surgery Study Section, Veterans Administration (October 1, 1994-June 30,
 Ad Hoc Review Committee - National Institute of Health Surgery and Bioengineering
 Special Reviewer - Center for Disease Control Injury Research Study Section (May
 Reviewer- NIH Special Study Section-B2 (July 1991)

Editorial Boards

Journal of Vascular Surgery- Member
 Journal of American College of Surgeons – Member
 Angiology- Senior Editor
 Cell Transplantation - Member
 Journal Surgical Research - Member
 American Journal of Physiology - Special Reviewer

BIBLIOGRAPHY

Ph.D. Thesis:

Tubular Absorption and Catabolism of Low Molecular Weight Proteins. Cornell University Medical College, New York, New York, 1981.

Manuscripts:

1. Sumpio BE, Maack T. Kinetics, Competition, and Selectivity of Tubular Absorption of Proteins. *Am J Physiol* 243(12):F379-392, 1982.
2. Sumpio BE, Chaudry IH, Baue AE. Enhanced functional recovery of isolated perfused rat kidneys subjected to warm ischemia after treatment with ATP-MgCl₂. *Circ Shock* 10(3):278, 1983.
3. Sumpio BE, Chaudry IH, Clemens MG, Baue AE. Amelioration of gentamicin nephrotoxicity by ATP-MgCl₂ treatment. *Circ Shock* 31:68-69, 1984.
4. Sumpio BE, Ernstoff M, Kirkwood J. Urinary excretion of interferon, beta-2 microglobulin and albumin during interferon therapy. *Cancer Res* 44(8):3599-3607, 1984.
5. Sumpio BE, Camargo MG, Maack T. Kinetics of renal catabolism of absorbed proteins: influence of lysosomal pH. *Contributions to Nephrology* 42:795-821, 1984.
6. Sumpio BE, Chaudry IH, Baue AE. Nuclear magnetic resonance study showing the reperfusion injury following ischemia and its improvement with ATP-MgCl₂ treatment. *Surg Forum* 35:17-19, 1984.
7. Sumpio BE, Chaudry IH, Clemens MG, Baue AE. Accelerated recovery of isolated rat kidney with ATP-MgCl₂ after warm ischemia. *Am J Physiol* 247:R1047-R1053, 1984.
8. Camargo MJF, Sumpio BE, Maack T. Renal hydrolysis of absorbed protein: influence of load and lysosomal pH. *Am J Physiol* 247:F656-664, 1984.
9. Sumpio BE, Chaudry IH, Baue AE. ATP-MgCl₂ ameliorates the reperfusion injury following ischemia as determined by ³¹P-NMR. *Arch Surg* 120(2):165-169, 1985.
10. Sumpio BE, Chaudry IH, Baue AE. Reduction of the drug-induced nephrotoxicity by ATP-MgCl₂. I. Effects on the cis-diaminedi-chloroplatinum-treated isolated perfused kidneys. *J Surg Res* 38(5):429-437, 1985.
11. Sumpio BE, Chaudry IH, Baue AE. Reduction of the drug-induced nephrotoxicity by ATP-MgCl₂. II. Effects on gentamicin-treated isolated perfused kidneys. *J Surg Res* 38(5):429-437, 1985.
12. Sumpio BE, Traquina DN, Gusberg RH. Comparison of the results of surgery in

occlusive vs. aneurysmal disease of the abdominal aorta. *Arch Surg* 120(7):817-819, 1985.

13. Sumpio BE, Hayslett JP. Renal handling of proteins during health and disease states. *Quart J Med, New Series* 57, 222:611-635, 1985.

14. Sumpio BE, Chaudry IH, Baue AE. Alleviation of the cyclosporine induced nephrotoxicity with ATP-MgCl₂ and Verapamil. *Surg Forum* 36:336-338, 1985.

15. Sumpio BE, Hull MJ, Baue AE, Clemens MG, Chaudry IH. Comparison of effects of ATP-MgCl₂ and Adenosine-MgCl₂ on renal function following ischemia. *Circ Shock* 18:375-376, 1986.

16. Sumpio BE, Hull MJ, Baue AE, Chaudry IH. Effects of ATP-MgCl₂ and adenosine-MgCl₂ administration on intracellular ATP levels in the kidney. *Biochem Biophys Acta* 862(2):303-308, 1986.

17. Sumpio BE, Dwyer JM, Flye MW. T-lymphocyte subsets in renal allograft recipients undergoing different immunosuppression protocols. *Curr Surg* 43(6):502-503, 1986.

18. Sumpio BE, Hull MJ, Chaudry IH, Stephan RN, Baue AE. Verapamil and ATP-MgCl₂ prevents cyclosporine-induced nephrotoxicity by improving mitochondrial and tissue Ca²⁺/Mg²⁺ ratios. *Surg Forum* 37:349-351, 1986.

19. Morse SS, Strauss EB, Sumpio BE. Apparent arterial occlusion due pneumatic antishock garment: pitfall in trauma angiography. *AJR* 147:391-392, 1986.

20. Sumpio BE, Ballantyne GH, Zdon M, Modlin IM. Acute appendicitis in the elderly: an unusual presentation of colon cancer. *Dis Colon Rectum* 29:668-670, 1986.

21. Sumpio BE, Bhatt S, May CJ. Lumbar actinomycosis: an unusual presentation of primary actinomycotic empyema. *Infections in Surgery* 6(3):148-155, 1987.

22. Sumpio BE, Baue AE, Chaudry IH. Treatment with Verapamil and ATP-MgCl₂ reduces cyclosporine nephrotoxicity. *Surgery* 101:315-322, 1987.

23. Sumpio BE, Hull MJ, Baue AE, Chaudry IH. Effect of ATP-MgCl₂ and adenosine-MgCl₂ on function of ischemic kidneys. *Am J Physiol* 252:R388-R393, 1987.

24. Sumpio BE, Dwyer JM, Flye MW. T-lymphocyte subsets in cyclosporine - and azathiaprine - treated renal allograft recipients. *Annals of Surgery* 205(1):49-53, 1987.

25. Sumpio BE, Jennings T, Marino M, Sullivan P. Adenoid cystic carcinoma of the breast: data from the Connecticut Tumor Registry and a Review of the Literature. *Annals of Surgery* 205(3):295-301, 1987.

26. Sumpio BE, Upchurch GR, Kaiser D, Adkinson JT, Palladino GW, Johnson G. Effect

of viscosity and oncotic pressure on the function of isolated perfused rat kidneys. *Circ Shock* 21:360, 1987.

27. Sumpio BE, Gusberg RJ. Neurologic deficit following blunt abdominal aortic trauma. *J Vasc Surg* 6:412-414, 1987.

28. Sumpio BE, Baue AE, Chaudry IH. Alleviation of cyclosporine and nephrotoxicity with Verapamil and ATP-MgCl₂: mitochondrial respiratory and calcium studies. *Annals of Surgery* 206: 655-660, 1987.

29. Sumpio BE, Banes AJ, Letton RL, Levin LG, Johnson G. Mechanical stress stimulates aortic endothelial cells to proliferate. *J Vasc Surg* 6:252-256, 1987.

30. Sumpio BE, Banes AJ, Buckley M, Johnson G. Alterations in aortic endothelial cell morphology and cytoskeletal protein synthesis during cyclic tensional deformation. *J Vasc Surg* 7: 130-138, 1988.

31. Sumpio BE, O'Leary G, Gusberg RJ. Variceal bleeding, hypersplenism and systemic mastocytosis: pathology and management. *Arch Surg* 123: 767-769, 1988.

32. Sumpio BE, Banes AJ. Response of cultured aortic smooth muscle cells to pulsatile stretching. *J. Surg. Res.* 44: 696-701, 1988.

33. Sumpio BE. Cyclosporine toxicity in the isolated perfused rat kidney. *Transplantation Proc* 20(3) Suppl 3: 712-716, 1988.

34. Sumpio BE, Banes AJ, Johnson G. Prostacyclin synthetic activity in cultured endothelial cells undergoing cyclic mechanical deformation. *Surgery* 104:383-389, 1988.

35. Sumpio BE, Banes AJ, Johnson G. Enhanced collagen production by smooth muscle cells during mechanical stretching. *Arch Surg* : 123: 1233-1236, 1988.

36. Buckley MJ, Banes AJ, Levin LG, Sumpio BE. Osteoblasts increase their rate of division and align in response to cyclic, mechanical tension in vitro. *J Bone Mineral* 4: 225-236, 1988.

37. Sumpio BE, Upchurch GR, Johnson G. The influence of perfusate viscosity, RBC deformability and drag on the function of an isolated perfused rat kidney. *J. Surg. Res.* 46:4-8, 1989.

38. Sumpio BE. Mechanical stress and cell growth. *J. Vasc. Surg.* 10: 570-571, 1989.

39. Sumpio BE, Kupper TS. Interleukin-6 production by vascular smooth muscle cells: etiology of SMC quiescence in vivo. *Surg. Forum.* 45: 323-325, 1989.

40. Sumpio BE, Banes AJ, Link GW, Iba T. Modulation of endothelial cell phenotype by

cyclic stretch: inhibition of collagen production. *J. Surg. Res.* 48:415-420, 1990.

41. Meier GH, Sumpio BE, Black HR, Gusberg RJ. Captopril Renal Scintigraphy-An advance in the detection and treatment of renovascular hypertension. *J. Vasc. Surg.* 11:770-777, 1990.

42. Sumpio BE, Widmann MD. Enhanced production of an endothelium-derived contracting factor by endothelial cells subjected to pulsatile stretch. *Surgery* 108: 277-282, 1990.

43. Letsou GV, Rosales O, Maitz S, Vogt A, Sumpio BE. Stimulation of adenylate cyclase activity in cultured endothelial cells subjected to cyclic stretch. *J. Cardiovasc. Surg.* 31(5):634-639, 1990.

44. Mills I, Letsou G, Rabban J, Sumpio BE, Gewirtz H. Mechanosensitive adenylate cyclase activity in coronary vascular smooth muscle cells. *Bioch. Biophys. Res. Comm.* 171(1):143-147,1990.

45. Garrand TJ, Stetz ML, O'Brien KM, Gindi GR, Sumpio BE, Decklebaum LI. Design and evaluation of a fiberoptic fluorescence guidance laser recanalization system. *Lasers in Surg. Med.* 11:106-116, 1991.

46. Sumpio BE. Hemodynamic Forces and the Biology of the Endothelium: Signal Transduction Pathways in Endothelial Cells Subjected to Physical Forces In Vitro. *J. Vasc. Surg.* 13: 744-746, 1991.

47. Iba T, Shin T, Sonoda T, Rosales O, Sumpio BE. Stimulation of endothelial secretion of tissue type plasminogen activator by repetitive stretch. *J. Surg. Res.* 50: 457-460, 1991.

48. Sumpio, B.E., Phan S. Nephrotoxic potential of FK 506. *Transplant. Proc.* 23(6): 2801-2802, 1991.

49. Brophy CM, Sumpio BE, Reilly JM, Tilson MD. Electrophoretic characterization of protease activity in aneurysmal aorta: Report of a unique 80 kDa elastolytic activity. *Surg. Res. Commun.* 10: 315-321, 1991.

50. Iba T, Sumpio BE. Morphologic evaluation of human endothelial cells subjected to repetitive stretch in vitro. *Microvasc. Res.* 42: 245-254, 1991.

51. Iba T, Maitz S, Furbert T, Rosales O, Widmann M, Spillane R, Shin T, Sonoda T, Sumpio BE. Effect of cyclic stretch on endothelial cells from different vascular beds. *Circ. Shock* 35: 193-198, 1991.

52. Rodriguez R, Stepke M, Maitz S, Cuono CB, Sumpio BE. Amelioration of renal ischemia by phosphocreatine. *J. Surg. Res.* 51(4): 271-274, 1991.

53. Sumpio BE. What's new in vascular surgery. *Current Surg* 48(7) 479-481, 1991.

54. Widmann MD, Sumpio BE. Persistent Hypoglossal Artery: An Anomaly Leading To a False Positive Carotid Duplex. *Annals Vasc. Surg.* 6: 176-178, 1992.
55. Iba T, Sumpio BE. Tissue plasminogen activator expression in endothelial cells exposed to cyclic strain in vitro. *Cell Transplant.* 1:43-50, 1992.
56. Rosales OR, Sumpio BE. Changes in cyclic strain increase inositol trisphosphate and diacylglycerol in endothelial cells. *Am. J. Physiol.* 262: C956-C962, 1992.
57. Sumpio BE. Molecular Biology of the Vascular System: Fundamental concepts and the tools. *J. Vasc. Surg.* 15: 906-907, 1992.
58. Rosales O, Sumpio BE. Protein kinase C is a mediator of the adaptation of vascular endothelial cells to cyclic strain in vitro. *Surgery* 112:459-466,1992.
59. Iba T, Mills I, Sumpio BE. Intracellular cyclic AMP levels in endothelial cells subjected to cyclic strain in vitro. *J. Surg. Res.* 52:625-630, 1992.
60. Widmann MD, Letsou GV, Baldwin J, Sumpio BE. Cardiac endothelial cells subjected to cyclic strain. *J. Surg. Res.* 53: 331-334, 1992.
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203. Chen QH, Li W, Quan Z, Sumpio BE. Modulation of vascular smooth muscle cell alignment by cyclic strain is dependent on reactive oxygen species and p38 MAPK. *J. Vasc. Surg.* 37:660-668, 2003.

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205. Lee T, Seo JW, Sumpio BE, Kim SJ. Immunobiologic analysis of arterial tissue in Buerger's disease. *Eur. J. Vasc. Endovasc. Surg.* 2003 May;25(5):451-7.

206. Li W, Chen Q, Mills I, Sumpio BE. Involvement of S6 Kinase and p38 Mitogen Activated Protein Kinase Pathways in Strain-Induced Alignment and Proliferation of Bovine Aortic Smooth Muscle Cells *J. Cell. Physiol.* 195:202-209,2003

207. Kakisis J, Abir F, Liapis C, Sumpio BE: An Appraisal of different Cardiac Risk Reduction Strategies In Vascular Surgery Patients. *Eur. J. Vasc. Endovasc. Surg.* 2003 Jun;25(6):493-504

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209. Lee TS, Nesselroth SM, Olson ET, Esemuede N, Lawler J, Sumpio BE, Gahtan V. Thrombospondin-1-induced vascular smooth muscle cell chemotaxis: The role of the type 3 repeat and carboxyl terminal domains. *Journal of Cellular Biochemistry* 2003 Jun 1;89(3):500-506.

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211. Zhang J, Li W, Sanders MA, Sumpio BE, Panja A, Basson MD. Regulation of the intestinal epithelial response to cyclic strain by extracellular matrix proteins. *FASEB J.* 2003 May;17(8):926-8.

212. Haga M, Chen A, Gortler D, Dardik A, Sumpio BE. Shear stress and cyclic strain may suppress apoptosis in endothelial cells by different pathways. *Endothelium* 10:149-157, 2003.

213. Zhang J, Li W, Sumpio BE, Basson MD. Fibronectin blocks p38 and jnk activation by cyclic strain in Caco-2 cells. *Biochem Biophys Res Commun.* 2003 Jul 4;306(3):746-749.

214. Haga M, Yamashita A, Paszkowiak J, Sumpio BE, Dardik A. Oscillatory shear stress increases smooth muscle cell proliferation and Akt phosphorylation. *J Vasc Surg.* 2003 Jun;37(6):1277-84.

215. Lee L, Blume P, Sumpio BE. Charcot joint disease in diabetes mellitus. *Ann. Vasc. Surg* 17 (5): 571-80, 2003

216. Renzulli J, Borromeo JR, Barkhordarian S, Sumpio BE. Abdominal aortic aneurysm in association with a congenital pelvic horseshoe kidney: sentinel report and technical consideration. *Vascular Medicine* 8:197-200, 2004.

217. Lee T, Sumpio BE. Cell signaling in vascular cells exposed to cyclic strain: The emerging role of protein phosphatases. *Biotech Appl Biol* 39:129-139, 2004.

218. Abir F, Barkhordarian S, Sumpio BE. Atherosclerotic Aortic Occlusion and Tertiary Syphilis: Case Report and Review of the Literature *Angiology* 12:257-259, 2004

219. Pradhan S, Sumpio B. Do the Estrogen Effects on Blood Vessels Translate into Clinically Significant Atheroprotection? *J. Am Col Surg* 198(3) 462-474, 2004.

220. Abir F, Barkhordarian S, Sumpio BE. Noncardiac vascular complications of coronary bypass procedure: A Review: *Int. J. Angiology* 13:1-6, 2004

221. AI Willis, D Pierre-Paul, BE Sumpio, V Gahtan. Vascular Smooth Muscle Cell Migration: Current Research and Clinical Implications. *Vascular and Endovascular Surgery* 38 (1):11-23, 2004

222. Kakisis J, Liapis C, Sumpio BE. Effects of cyclic strain on vascular cells. *Endothelium* 11(1): 17-28, 2004

223. Pradhan S, Sumpio B Molecular and biological effects of hemodynamics on vascular cells. *Front Biosci.* 2004 Sep 01;9:3276-85.

Books edited

1. Sumpio BE (editor) *Hemodynamic Forces and Vascular Cell Biology*, 1993, RG Landes Publishers, Austin, Texas

2. Sumpio BE and Sidawy AS (editors) *Basic Science in Vascular Disease*, Futura Publishing Co., Mt. Kisco, N.Y. 1997.

3. Chang J, Sumpio BE (editors) *Textbook of Angiology*. Springer Verlag, Minnesota, MN, 1999.

Book Chapters

1. Evans L, Sumpio BE. The Role of Mechanical Forces In Vitro in the Development of Intimal Hyperplasia. In *Myointimal Hyperplasia*, P. B. Dobrin (ed), RG Landes Publishers, Austin, Texas, p 111-134, 1994.

2. Mills I, Cohen CR, Sumpio BE. Cyclic strain and Vascular Cell Biology. In *Hemodynamic Forces and Vascular Cell Biology*, Sumpio BE (ed) RG Landes Publishers, Austin, Texas, p 66-89, 1993.

3. Isales C, Rosales O, Sumpio BE. Mediators and mechanisms of cyclic strain and shear stress-induced vascular responses. In *Hemodynamic Forces and Vascular Cell Biology*, Sumpio BE (ed) RG Landes Publishers, Austin, Texas, p 90-115, 1993.

4. Peyman J, Sumpio BE. Molecular Biology for Surgeons. In, *Basic Science of Vascular Disease*, Sumpio BE and Sidawy AS (editors), Futura Publishing Co., Mt. Kisco, N.Y., pp 17-68, 1997

5. Gallagher G, Sumpio BE. Vascular Endothelial Cell. In, *Basic Science of Vascular Disease*, Sumpio BE and Sidawy AS (editors), Futura Publishing Co., Mt. Kisco, N.Y. pp. 151-186, 1997

6. Mills, I, Sumpio BE. Smooth Muscle Cells. In, *Basic Science of Vascular Disease*, Sumpio BE and Sidawy AS (editors), Futura Publishing Co., Mt. Kisco, N.Y., pp 187-226, 1997

7. Brophy CM, Awolesi MA. Sumpio BE. Molecular mechanisms of Vasospasm. In, *Basic Science of Vascular Disease*, Sumpio BE and Sidawy AS (editors), Futura Publishing Co., Mt. Kisco, N.Y. pp.367-384, 1997.

8. Sumpio BE, Oluwole B, Wang X, Awolesi M. Regulation of nitric oxide synthase

expression and activity by hemodynamic forces. In *The Pathophysiology and Clinical Applications of Nitric Oxide*, Rubanyi GM (editor), Harwood Academic Publishers, Reading, U.K. Chapter 10 pp. 171-193, 1998.

9. Sai Sudhaker CB, Pollock JS, Sumpio BE. Acute mesenteric ischemia. In *Textbook in Angiology*, Chang J (editor), Springer-Verlag, Chapter 46 pp. 559-571.

10. Kamal K, Chang R, Sumpio BE. Diabetic Vascular Disease: Biochemical and Molecular Perspectives. In *Textbook in Angiology*, Chang J (editor), Springer-Verlag, Chapter 68 pp. 817-834.

11. Chang R, Kamal K, Sumpio BE. Tissue plasminogen Activator- Biological Perspectives for Surgeons. In *Textbook in Angiology*, Chang J (editor), Springer-Verlag, Chapter 103 pp. 1-59.

12. Mills I, Sumpio BE. Mechanical Forces and Cell Differentiation. In *Tissue Engineering of Prosthetic Vascular Grafts*, Zilla PM and Greisler HP (editors), R. G. Landes Company, Austin TX, Chapter 39, pp 423-436, 1999.

13. Quader M, Sawmiller CJ, Sumpio BE. Radio Contrast agents: History and Evolution In *Textbook in Angiology*, Chang J (editor), Springer-Verlag, Chapter 63 pp. 775-783.

14. Mills I, SumpioBE. Endothelium and cyclic strain. In *Mechanical Forces and the Endothelium*, Lelkes (ed) Harwood Academic Press, Chapter 12 pp 249-273, 1999.

15. Collins KA, Sumpio BE. Vascular Assessment. In *Clinics in Podiatric Medicine and Surgery*, Blume P (ed), W. B. Saunders, Philadelphia, PA, Volume 17, Number 2 Chapter 1, PP 171-192, 2000.

16. Sumpio BE, Blume PA. Contemporary management of foot ulcers. In *Trends in Vascular Surgery*, Pearce, W, Matsumura J, Yao J (eds) Precept Press, Chicago, IL, Chapter 28, pp 277-290, 2002

17. Borromeo JR, Sumpio BE. Strategies in preventing intimal hyperplasia. In *Advances in Vascular Surgery*, Whittemore A, Bandyk D, Cronenwett J, Herrtzer N, White R (eds) Mosby, St. Louis, MO, Chapter 14, pp 201-218, 2002

18. Sumpio BE, Lee T, Blume P. Vascular Evaluation and Arterial Reconstruction of the Diabetic Foot. In *Clinics in Podiatric Medicine and Surgery*, Jolly G, Zgonis T (eds) Saunders, Philadelphia, PA, pp 689-708, 2003

19. Sumpio BE, Pradhan S. Artherosclerosis: Biological and Surgical Considerations. In: Ascher E, Hollier L, Strandness DE, eds. *Haimovici's Vascular Surgery*, 5e. Malden, MA: Blackwell Science, Inc.; 2004. pp 137-163

Miscellaneous:

1. Sumpio BE. Endothelial Seeding in Vascular Surgery (Book Review).
J Vasc Surg 6:101, 1987.
2. Sumpio BE. The Kidney in Hypertension (Book Review).
J Vasc Surg 6:626, 1987.
3. Novak JN, Sumpio BE, Blume PA, Beaty JD, Enderle JD, A Graphical User Interface and System to Measure Foot Pressures in Diabetic Patients, Proceedings of the IEEE 27th Northeast Biomedical Engineering Conference, University of Connecticut, Storrs, CT, March 31-April 1, 2001, pp. 25-26.

Presentations:

1. Federation of American Society of Experimental Biology. Characteristics of a non-filtering isolated rat kidney preparation. Atlantic City, New Jersey, April 1978.
2. American Society of Nephrology. Catabolism of B2 microglobulin and cytochrome C by the isolated kidney. Washington, DC, November 1980.
3. Federation of American Society of Experimental Biology. Tubular absorption of low molecular weight proteins: kinetics, competition and selectivity. Atlanta, GA, April 1981.
4. Shock Society. Enhanced Functional Recovery of Isolated Kidneys Subjected to Warm Ischemia after Treatment with ATP-MgCl₂. Jackson Hole, WY, June 1983.
5. Federation of American Society of Experimental Biology. NMR spectra and function of Ischemic Isolated Kidney Reperfused with Phosphate Free Buffer and Treated with ATP-MgCl₂. Atlanta, GA, April 1984.
6. Shock Society. Amelioration of Gentamicin Nephrotoxicity by ATP-MgCl₂ Treatment. Toronto, Canada, June 1984.
7. New England Vascular Society. Comparison of Results of Aortic Grafting in Occlusive and Aneurysmal Disease. Dixville Notch, New Hampshire, October 1984.
8. Surgical Forum, American College of Surgeons. Nuclear Magnetic Resonance Study Showing the Reperfusion Injury Following Ischemia and Its Improvement with ATP-MgCl₂.
9. Association of Academic Surgeons. Amelioration of Gentamicin and Cis-platinum Nephrotoxicity by ATP-MgCl₂. San Antonio, Texas, November, 1984.

10. Federation of American Society of Experimental Biology. Renal Handling of Exogenous ATP-MgCl₂. Anaheim, California, April 1985.
11. Shock Society. Comparison of adenosine-MgCl₂ and ATP-MgCl₂ effects in the isolated perfused kidney. Baltimore, Maryland, June 1985.
12. Surgical Forum, American College of Surgeons. Alleviation of Cyclosporine-induced Nephrotoxicity with ATP-MgCl₂ and Verapamil. Chicago, Illinois, October 1985.
13. Society of University Surgeons (Residents' Forum). Effect of Immunosuppression regimens on circulating T-lymphocyte subsets. Richmond, Virginia, February 1986.
14. Federation of American Society of Experimental Biology. Cyclosporine Toxicity in the Isolated Kidney. St. Louis, Missouri, April 1986.
15. Shock Society. Comparison of Effects of ATP-MgCl₂ and Adenosine MgCl₂ on Renal Function Following Ischemia. Scottsdale, Arizona, June 1986.
16. Surgical Forum, American College of Surgeons. Verapamil and ATP-MgCl₂ Prevents Cyclosporine Induced Nephrotoxicity by Improving Mitochondrial and Tissue Ca²⁺/Mg²⁺. New Orleans, Louisiana, October 1986.
17. Southern Association for Vascular Surgery. Response of Aortic Endothelial Cells to Mechanical Cyclic Stretching. Scottsdale, Arizona, January 1987.
18. 20th Hugh Lofland Conference on Arterial Wall Metabolism. Effect of Mechanical Stress on Endothelial and Smooth Muscle Cell Biology in Culture. Winston-Salem, North Carolina. May 1987.
19. North Carolina Chapter of American College of Surgeons. Influence of Perfusate Viscosity and Oncotic Pressure on Renal Function. Myrtle Beach, South Carolina, May 1987.
20. Grand Rounds, Stanford University Medical Center. Management of Acute Renal Failure. Palo Alto, California, November 1986.
21. Grand Rounds, University of North Carolina. Role of Vascular Stress on Cells in Culture. Chapel Hill, North Carolina, January 1987.
22. International Society for Cardiovascular Surgery. Alterations in Endothelial Cell Morphology and Cytoskeletal Proteins During Repetitive Mechanical Stress. Toronto, Canada, June 1987.
23. Shock Society. Effects of Viscosity and Oncotic Pressure on the Function of Isolated Perfused Rat Kidneys. Montreal, Canada, June 1987.

24. New England Vascular Society. Cyclic Stretching of Aortic Smooth Muscle Cells Stimulates Collagen Synthesis. Bretton Woods, New Hampshire, Sept. 1987.
25. Association for Academic Surgery. Response of aortic endothelial cells and smooth muscle cells to pulsatile stretching in culture. Orlando, Florida, November 1987.
26. Association for Academic Surgery. Effect of perfusate viscosity, RBC deformability and drag on the function of an isolated kidney. Orlando, Florida, November 1987.
27. The Second International Congress on Cyclosporine. Cyclosporine toxicity in an isolated perfused kidney. Washington, D.C., November 1987.
28. Society of University Surgeons. Mechanical stretching of cultured endothelial cells: effect on prostacyclin synthetic activity. San Antonio, Texas, February 1988.
29. Shock Society. The effect of RBC deformability and fluid drag on renal function. Fontana, Wisconsin, June, 1988.
30. Gordon Conference. Mechanical stretching of vascular cells. Meriden, New Hampshire, August 1988.
31. NIH Research Initiatives in Vascular Disease (Invited Speaker). Mechanical stress and cell growth. Bethesda, Maryland, March 1989.
32. Federation of American Society of Experimental Biology. Repetitive mechanical stretching of aortic endothelial cells in culture: inhibition of collagen synthesis. New Orleans, La, March 1989.
33. Invited Speaker, University of Michigan. Role of mechanical stress in cell growth. Ann Arbor, MI, June 1989.
34. International Society for Cardiovascular Surgery, Toronto. The role of adenylate cyclase in the transduction of pulsatile stretch signals to endothelial cells in culture. Toronto, Canada, September 1989.
35. New England Society for Vascular Surgery. Salvage of large ischemic soft-tissue and bony defects of the lower extremity with revascularization and "local" flap coverage. Bretton Woods, New Hampshire, September 1989.
36. Surgical Forum, American College of Surgeons. Interleukin-6 production by vascular smooth muscle cells during cyclic stretch: etiology of SMC quiescence in vivo? Atlanta, Georgia, October 1989.
37. Association for Academic Surgery. Collagen synthesis is inhibited in aortic endothelial cells subjected to cyclic stretch in vitro. Louisville, Kentucky, November 1989.

38. Visiting Professor, University of California, San Francisco. Exercising endothelial cells in culture. San Francisco, CA. February 1990.
39. Society for University Surgeons. Enhanced production of a smooth muscle cell contracting factor by endothelial cells subjected to pulsatile stretch in vitro. Los Angeles, CA. February 1990.
40. Federation of American Society of Experimental Biology. Endothelin production by endothelial cells subjected to pulsatile stretch in vitro. Washington, D.C. April 1990.
41. Gore Lecture (Invited Speaker). Role of hemodynamics in cell growth. Boston, MA. April, 1990.
42. Gladstone Foundation (Invited Speaker). Modulation of endothelial cell phenotype by cyclic stretch. San Francisco, August, 1990.
43. Visiting Professor, Bay State Medical Center, Springfield, MA. Endothelial cells alterations with external forces. October 1990.
44. NIH Research Initiatives in Vascular Disease (Invited Speaker) Hemodynamic Forces and the Biology of the Endothelium: Signal Transduction Pathways in Endothelial Cells Subjected to Physical Forces In Vitro. Bethesda, MD. February 1991.
45. Invited speaker, Workshop on Mechanical Stress Effects on Vascular Cells, Atlanta, Ga. Tissue plasminogen activator production and phosphoinositide activation in cultured human endothelial cells subjected to cyclic strain. April, 1991.
46. Gordon Conference on Atherosclerosis (Invited speaker). Phosphatidylinositol activation of endothelial cells exposed to cyclic strain. Meriden, New Hampshire, June 1991.
47. Invited Speaker, Whitaker Foundation. Mechanical deformation of endothelial cells grown on different biomaterials and surfaces. Snowbird, Utah, Aug. 1991.
48. Invited speaker, World Congress for Microcirculation. Microfilament reorientation in endothelial cells subjected to pulsatile stretch. Louisville, KY. Sept. 1991.
49. NIH Research Initiatives in Vascular Disease (Invited Speaker) Molecular biology and the vascular surge: Fundamental concepts and the tools. Bethesda, MD. Feb. 1992.
50. Invited speaker. Fundamentals of surgical research course. Research hypothesis and design, Chicago, Il. July 1992.
51. Guest faculty. Thrombosis, Thromboembolism and Thrombolysis Post-graduate Course. The aortic arch and carotid vessels as sources of stroke, New Haven, August 1992.

52. Visiting Professor, Loyola University Medical Center, Chicago, IL. Mechanisms by which endothelial cells sense changes in hemodynamics: implications for intimal hyperplasia. Sept. 1992.
53. New England Society for Vascular Surgery. Smooth muscle cell inhibition by 8-methoxypsoralen phototherapy. Dixville Notch, New Hampshire Sept. 1992.
54. American College of Surgeons, Surgical Forum (Vascular Surgery). Are G-proteins mechanosensors for endothelial cells? New Orleans, LA, Oct 1992.
55. Grand Rounds Speaker, University of Connecticut School of Medicine. Mechanisms by which endothelium senses changes in hemodynamics: Implications for the pathogenesis of atherosclerosis and intimal hyperplasia. Hartford, CT. Oct. 1992.
56. International Society for Applied Cardiovascular Biology (Invited Speaker). Signal transduction mechanisms of endothelial cells subjected to cyclic strain. St. Louis, MO. November 1992.
57. Invited Speaker, American Heart Association, CT Affiliate. How does the endothelium sense the changing circulation?, Meriden, CT December 1992
58. Invited Faculty, Angioscopy Course sponsored by Harvard Medical School. Molecular Biology for Vascular Surgeons. Boston, MA, December 1992.
59. Visiting Professor, Framingham Union MetroWest Medical Center. Mechanisms by which the endothelium senses changes in hemodynamics. Framingham, MA, February 1993.
60. Invited Speaker Controversies in Surgery 1993: Basic Science for the General Surgeon. Farmington, CT. March 1993.
61. Visiting Professor, University of Pittsburgh. How does the endothelium sense changes in hemodynamics? Pittsburgh, PA. March 1993.
62. Young Investigator Award (Invited Speaker) Japan Surgical Society. Nitric Oxide Synthase Induction in Endothelial Cells. Sendai, JAPAN, March 1993.
63. Visiting Professor, Chiba University Medical School. From Bench to Bedside- How EC Sense Changes in Hemodynamics., Chiba, JAPAN, March 1993.
64. Invited Symposium Speaker, Experimental Biology Meeting. Signal Transduction Mechanisms in Vascular Cells Exposed to Strain. New Orleans, LA, April 1993.
65. Invited Speaker, Vascular Forum. Atherogenesis. New Haven, CT. June 1993.
66. Guest faculty. Thrombosis, Thromboembolism and Thrombolysis Post-graduate Course. The aortic arch and carotid vessels as sources of stroke, New Haven, August 1993.

67. Invited Speaker. International Vascular Conference. Effect of mechanical forces on vascular cells. Beijing, CHINA. October 1993.
68. Visiting Professor. Osaka University Medical College. Mechano-transduction systems in endothelial cells. Osaka, JAPAN, October 1993.
69. Invited Speaker, American Society for Cell Biology: Symposium on Heterogeneity of Vascular Cell Responses., New Orleans, LA. December 1993.
70. NIH Research Initiatives in Vascular Disease (Invited Speaker) Research Models in Vascular Disease: Development of Pulsatile Pressure and Cyclic Strain Models. Bethesda, MD. February 1994.
71. Invited Speaker. American Physiological Society Conference on Mechanotransduction and the regulation of Cell Growth and Differentiation. Biochemical and cytoskeletal signaling with cyclic strain. Sarasota, FL. October 1994.
72. Invited Speaker. Department of Physiology, University of Connecticut. Gene regulation by mechanical forces. Farmington, CT. February 1995.
73. Young Investigator Award (Invited Speaker) Japan Surgical Society. Effect of pulsatile pressure on endothelial cell proliferation Nagoya, JAPAN, April 1995.
74. Invited Speaker. Department of Physiology, Nagoya University School of Medicine. Insights into the coupling of mechanical forces and vascular cell response. Nagoya, JAPAN, April 1995.
75. International Society for Applied Cardiovascular Biology (Invited Speaker). Mechanical forces and gene regulation. Manchester, England March 1996.
76. Visiting Lecturer. Rayne Institute Center for Cardiopulmonary Diseases. Transcriptional regulation by cyclic strain. London, U.K. March 1996.
77. Invited Speaker. William Harvey Institute. Nitric oxide synthase gene regulation by cyclic strain. London, U.K. March 1996.
78. Invited Speaker Australasian Society for Vascular Surgery. May 4-11th, 1996
79. (Invited Speaker) Japan Society for Vascular Surgery. Gene therapy for vascular diseases- Does it make sense or anti-sense? Asahikawa, JAPAN, June 1996.
80. Invited Speaker Gordon Conference on Bioengineering and Orthopedic Sciences. Focal Adhesion proteins as mechanotransducers. Andover, New Hampshire, July 1996
81. Invited Professor. Beth Israel Deaconess Dept. of Surgery. Future therapy for atherosclerosis. Boston, MA Feb. 1997.

82. Invited Speaker. NIH Research Initiatives. Wall stress regulation of endothelial cells. Bethesda, MD, Feb. 1997.
83. Moderator for Educational panel, Association of Program Directors in Surgery, San Diego, CA, April 1997.
84. Visiting Professor. University of Nebraska Medical Center. Atherosclerosis- Was Osler right?. Omaha, NE, April 1997.
85. Invited Speaker. International College of Angiology. Vascular disease and biology, Istanbul, Turkey, June 1997.
86. Invited Speaker. Japanese Society for Abdominal Emergency Medicine. Mesenteric Vascular Emergencies: Thoughts for the new millenium. Urayasu, JAPAN, September 1997.
87. Invited Speaker. International Atherosclerosis Society. Bordeaux, Paris, FRANCE. October 1997.
88. Distinguished Visiting Scientist. Department of Physiology and Cell Biology, Albany Medical College, Albany, New York. October 1997.
89. Invited Speaker. Philippine Stroke Society. Baguio City, PHILIPPINES, November 1997.
90. Visiting Professor, Dartmouth Medical Center, Atherosclerosis-From molecules to man Hanover, N.H. November 1997.
91. Visiting Professor, New York Hospital Cornell University Medical Center, Atherosclerosis-, New York January 1998.
92. Invited Speaker, New England Surgical Society Spring Meeting, New Haven, CT, March 1998.
93. Invited Speaker, Asian Vascular Society, Gene Therapy- Hope or Hype?, Beijing China, May 1998.
94. Invited Speaker, International Society for Heart Research, Regulation of NOS expression in response to mechanical load in the vascular system., Rhodes, Greece, May 1998.
95. Invited Speaker, International Union of Angiology, Is the Geometry of a Vascular Anastamosis Important?, Tokyo, Japan, September 1998.
96. Invited Speaker, American College of Surgeons, Vascular Surgery Post-Graduate Course, Hemodynamic and physiologic effects of vein-cuffs on anastamoses, Orlando, FL, October 1998.
97. Invited Speaker, Vascular Surgery Symposium, Biologic basis for vein-cuffs, New York, N.Y., November 1998.

98. Visiting Professor, Maimonides Medical Center, Is there a cure for atherosclerosis?, Brooklyn, N.Y., December 1998.
99. Invited Speaker, NIH Research Initiatives. Mechano-signaling in vascular cells. Bethesda, MD, March 1999.
100. Invited Speaker, Ist Tri-Institutional M.D./Ph.D. Alumini Day. Is clinican-surgeon an oxymoron?. New York, N.Y. March 1999.
101. Visiting Professor Dept. of Surgery, Univ. of Tennessee . Low Molecular Weight Heparins:Current use and indications. Knoxville, TN April 1999.
102. Keynote Lecturer, Student Research Day. UTMCK Progress in the treatment of Atherosclerosis. Knoxville, TN April 1999.
103. Invited Symposium Speaker. Biomedical Engineering Society. Sensing and coupling pathways in endothelial cells, Washington, D.C. April 1999.
104. Invited Guest, Toronto and Vicinity Vascular Society. Multidisciplinary approach to diabetic limb salvage. Toronto, April 1999.
105. Invited Professor, Toronto General Hospital. Mechanotransduction in vascular cells. Toronto, April 1999.
106. Invited Plenary Speaker, Japan Society for Vascular Surgery. Can surgeons control the destiny of a vascular graft. Tokyo, Japan, May 1999.
107. Invited Symposium Speaker, Japan Society for Vascular Surgery. Low molecular weight heparins: the drug for the new millenium. Tokyo, Japan, May 1999.
108. Visiting Professor, Albany Medical College. Rationale for treatment of DVT. Albany, N.Y. June 1999.
109. Invited Speaker, Orange Medical County Society Meeting. Ulcer classification and treatment. Newburgh, N.Y. June 1999.
110. Invited Speaker, International College of Angiology. Surgery of the cell-hope or hype for angiology. Sapporro, Japan, July 1999.
111. Visiting Professor, University of Massachusetts. Wound Healing. Worcester, MA August 1999.
112. Invited Speaker. New York Vascular Symposium. Anastomotic configurations. Tarrytown, NY Sept. 1999.

113. Visiting Professor, New York Medical College. DVT Prevention. Valhalla, NY October 1999.
114. Visiting Professor, Robert Wood Johnson-UMDNJ. Progress in Atherosclerosis. New Brunswick, NJ. November 1999.
115. Invited Speaker, Gulf Coast Vascular Society. Multi-disciplinary management of the diabetic foot. New Orleans, LA, November 1999
116. Invited Speaker, Vascular Surgery Symposium, Low molecular weight heparins: Indication for their use., New York, N.Y., November 1999.
117. Invited Speaker. Icelandic Surgical Society, "Is Atherosclerosis a Curable Disease", Reykjavik, Iceland, Jan 2000.
118. Invited Speaker. Icelandic Surgical Society, "Aggressive management of the diabetic foot", Reykjavik, Iceland, Jan 2000.
119. Invited Speaker, Connecticut Podiatric Medical Association, "A cure for tired feet?", Meriden, CT, January 2000.
120. Invited Speaker, Biomedical Engineering Society Symposium, "Integrins as mechanotransducers, San Diego, April 2000.
121. Invited Professor, Northwestern University Engineering School, "Cell signaling and hemodynamic forces", Evanston, IL, May 2000.
122. Visiting Professor and Research Day Speaker, University of Iowa, "Atherosclerosis localization by hemodynamic forces", Iowa City, Iowa, May 2000.
123. Guest Lecturer, Japan Vascular Surgery Society, "Treatment of Atherosclerosis: Hope for the New Millennium", Tokyo, Japan, May 2000.
124. Invited Speaker, European Society for Surgical Research "Activation of FAK and c-src in vascular endothelial cells by cyclic strain", Malmo, Sweden, May 2000.
125. Invited Visiting Professor, University of Aarhus "Hemodynamic Forces and Vascular Biology", Aarhus, Denmark May 2000.
126. Visiting Professor, Medical College of Virginia, "DxRx DVT", Richmond, Virginia June 2000.
127. Invited Speaker, Connecticut Podiatric Association Meeting, "Claudication-diagnosis and treatment", Westbrook, CT July 2000.
128. Millennium Conference Speaker, European Society for Vascular Surgery, "Cure for

Atherosclerosis-Hope of hype?, Royal Geographic Society, London, UK, September 2000.

129. Guest Speaker, Foot and Ankle Society, "Diagnosis and management of claudication", Scranton, Pennsylvania, November 2000.

130. Invited Professor, University of North Carolina, "Atherosclerosis", Chapel Hill, NC, November 2000.

131. Invited Professor, Weill School of Medicine, "Recognition and Prevention of DVT", New York, NY November 2000.

132. Invited Professor, University of Pennsylvania School of Engineering, "Physical Forces and Signaling", Philadelphia, PA January 2001.

133. Grand Rounds Speaker, Westchester Medical, "Atherosclerosis Update", Valhalla, NY, February 2001.

134. Invited Speaker, NIH Research Initiatives, Lifeline Foundation, "Signaling in Vascular Cells", Bethesda, MD March 2001.

135. Invited Speaker, Royal College of Surgeons, "Can vascular surgery encompass basic science", New Haven, CT March 2001.

136. Invited Speaker, Royal College of Surgeons, "Diabetic foot ulcers", Royal Pavillion, Barbados, March 2001.

137. Invited Faculty, Westchester Vascular Symposium, "LMWH" and "Diabetic Feet", Valhalla, NY, March 2001.

138. Invited Faculty, Society for Clinical Vascular Surgery, Hemodialysis Access Symposium, "Strategies for preventing intimal hyperplasia", Boca Raton, FL. April 2001.

139. Featured Speaker, VA FeAST Study Meeting, "Hemodynamic Forces and the localization of Atherosclerosis", Chicago, IL. April 2001.

140. Invited Faculty, American College of Surgeons Postgraduate Course, "Neurologic deficits after carotid surgery", Toronto, CA April 2001.

141. Visiting Professor, University of Medicine and Dentistry New Jersey, "Atherosclerosis", Newark, NJ May 2001.

142. Invited Speaker, Chinese Society for Vascular Surgery, "Genetic insights on Atherosclerosis", Shanghai, China, May 2001.

143. Visiting Professor, Shanghai University, XinHua Hospital, "Foot Ulcers", Shanghai, China, May 2001.

144. Visiting Professor, University of Hong Kong, Queen Mary Hospital, "Localization of Atherosclerosis", Hong Kong, May 2001.
145. Invited Speaker, Scandinavian Society for Vascular Surgery, "Update on Atherosclerosis", "Vascular Trauma", Reykjavik, Iceland, June 2001.
146. Invited Speaker, Korean Society for Vascular Surgery, "Update on Gene Therapy for Vascular Disease", Cheju, Korea, November 2001.
147. Invited faculty, Frontiers in Vascular Surgery Symposium, "Strategies for minimizing intimal hyperplasia", New York, NY November 2001.
148. Guest Speaker, International Society for Applied Cardiovascular Biology, "Cyclic Strain Mechanotransduction", St. Gallen, Switzerland, March 2002.
149. Guest Speaker, European Cardiovascular Surgery Society, "Surgery of the cell-the new frontier for surgeons", Zurs, Austria, March 2002.
150. Visiting Professor, University of Florida, "Gene therapy for cardiovascular disease", Gainesville, FL March 2002.
151. Invited Faculty, International Union of Angiology, "Hemodynamic Regulation of the Blood Vessel Wall", New York, NY, April 2002
152. Guest Speaker, NY Chapter of American College of Surgeons, "Management of deep venous thrombosis", Coopertown, NY, April 2002.
152. Visiting Professor, Albany Medical Center, "Intimal Hyperplasia", Albany, NY, April 2002.
153. Visiting Professor, Englewood Hospital, "Evaluation and Management of DVT", Englewood, NJ, May 2002.
154. Invited faculty, Japanese Society for Vascular Surgery, "Surgical management of acute limb ischemia", Okinawa, Japan, May 2002.
155. Visiting Professor, University of Arkansas Medical Center, "Strategies to reduce intimal hyperplasia", Little Rock, AK, May 2002.
156. Grand Rounds, Stamford Medical Center, "Out-patient treatment of DVT, Stamford, CT, July 2002.
157. Salzman Visitng Lecture, Beth Israel Deaconess Medical Center, "Can surgeons control the fate of a vascular graft", Boston, MA, October 2002.

158. Invited faculty, Vascular Endovascular Issues Techniques Horizons Symposium, “Current concepts in foot ulcers”, New York, NY November 2002.
159. Guest Speaker, Philippine College of Surgeons, “Endovascular management of vascular trauma”, Manila, Philippines, December 2002.
160. Invited faculty, Northwestern Vascular Symposium, “Contemporary management foot ulcers”, Chicago, IL December 2002.
161. Invited faculty, Hong Kong Surgical Forum, “Is there a cure for Atherosclerosis”, Hong Kong, PRC January 2003.
162. Grand Rounds, North Shore University Hospital, “Contemporary evaluation and management of DVT”, Manhasset, NY April 2003.
163. Guest Speaker, 1st Annual Society for Caribbean Surgeons. “Wine as a Medicine”, Port-of-Spain, Trinidad, June 2003
164. Invited Speaker, UEMS Symposium, European Society for Vascular Surgery, “The need for basic science plus non-surgical training”, Dublin, Ireland, September 2003
165. Invited Speaker, Minnesota Surgical Society, “Red wine and its cardioprotective effect”, Minneapolis, MN, October 2003.
166. Visiting Professor, University of Minnesota, “Future directions for surgical innovations in vascular surgery”, October 2003.
167. Distinguished Professor, University of South Alabama, “Regulation of vascular wall biology by hemodynamic forces”, Mobile, AL, November 2003
168. Shumacker Distinguished Lecture, Uniformed Services United Health System, “Future innovations for blood vessel reconstruction”, Bethesda, MD December 2003.
169. Invited Faculty, Controversies and Updates in Endovascular and Cardiac Surgery, “Multidisciplinary approach can save more diabetic feet-Yale Experience”, Paris, France, January 2004
170. Invited Speaker, Japan Society for Cardiovascular Surgery, “Hemodynamic forces and coronary artery disease: The molecular basis.” Fukuoka, Japan, February 2004
171. Invited Speaker, Wound Healing and Diabetic Foot Symposium, “Improving outcomes for diabetic feet”, University of West Indies, Barbados, March 2004
172. Visiting Professor, University of California Torrance, “Hemodynamic forces and atherogenesis: the molecular basis. Long Beach, CA, April 2004.

173. Invited Speaker, Kansas City Surgical Society, "Management of the diabetic foot", Kansas, MO, April 2004.
174. Invited Speaker, Japan Society for Vascular Surgery, "Clinical and biologic Relevance of a Cuffed Prosthetic Graft", Tokyo, Japan, May 2004.
175. Grnad Rounds, Marthas Vineyard Hospital, "Management of Diabetic Feet", Oaks Bluff, MA, August 2004.
176. Invited Faculty, Australia New Zealand Society for Vascular Surgery "Artificial Blood Vessels-The Holy Grail", Rotorua, New Zealand, September 2004.