CURRICULUM VITAE ALAN M. SPEIR, M.D.

PERSONAL DATA:

Date of Birth: August 9, 1947

Place of Birth: Charlotte, North Carolina Marital Status: Married, two children

CURRENT POSITIONS:

Medical Director of Cardiac Surgery – Inova Fairfax Hospital, Falls Church, Virginia 2009 - Present

Chief, Section of Cardiac Surgery - Inova Fairfax Hospital, Falls Church, Virginia 2004 - 2009

Clinical Chief, Cardiothoracic Surgery - National Naval Medical Center, Bethesda, Maryland - August 1997 - present

Vice-Chairman, Virginia Cardiac Surgery Quality Initiative, 2000 – present

Senior Staff, Department of Surgery, Sections of Cardiac, Thoracic, and Vascular Surgery - Inova Fairfax Hospital Hospital, Falls Church, Virginia 1983 - Present

Senior Staff, Department of Surgery, Sections of Cardiac, Thoracic, and Vascular Surgery - Inova Alexandria Hospital, Alexandria, Virginia

Senior Staff, Department of Surgery, Sections of Cardiac, Thoracic, and Vascular Surgery - Virginia Hospital Center-Arlington, Arlington, Virginia

Assistant Professor of Surgery, Uniformed Services University of the Health Sciences, Bethesda, Maryland

Assistant Clinical Professor of Surgery, Georgetown University School of Medicine, Washington, D.C.

PAST POSITIONS:

Department Head, Cardiothoracic Surgery Department, National Naval Medical Center, Bethesda, Maryland. (1987-1997)

Vice President, Cardiovascular & Thoracic Surgery Associates, 1994-1997; 2000-2003

EDUCATION:

COLLEGE University of North Carolina at Chapel Hill

Chapel Hill, North Carolina

B. A. English, 1969

MEDICAL SCHOOL Medical College of Georgia

Augusta, Georgia M. D. Degree, 1975

INTERNSHIP University of Texas Medical School

Houston, Texas

July 1975 - June 1976

RESIDENCY University of Texas Medical School

Houston, Texas. General Surgery

July 1976 - June 1979

University of Texas Medical School

Houston, Texas. Chief Resident in Surgery

July 1979 - June 1980

Texas Heart Institute

Houston, Texas. Cardiovascular and Thoracic Surgery

July 1980 - June 1982

MILITARY SERVICE:

United States Army Reserve, 1971 - 1976

BOARD CERTIFICATION:

American Board of Surgery, 1981

American Board of Thoracic Surgery, 1984

Recertified, 1994 Recertified, 2002

Expiration: 12/31/2014

STATE LICENSURE:

Virginia

Maryland

Texas

PROFESSIONAL SOCIETIES:

Society of Thoracic Surgeons, Member Government Relations Committee

Southern Thoracic Surgical Association

American College of Cardiology (Fellow)

American College of Surgeons (Fellow)

American College of Chest Physicians (Fellow)

Fairfax County Medical Society

Medical Society of Virginia

Virginia Thoracic Society

Denton A. Cooley Surgical Society

The Metropolitan Washington Society of Thoracic and Cardiovascular Surgeons

American Medical Association

DIPLOMATE:

National Board of Medical Examiners

HONORS:

Alpha Omega Alpha, 1975

Eaton Surgical Research Scholar, 1979, 1980

John C. Waldron Award - Outstanding Resident in Surgery, 1980

University of Texas Medical School at Houston, 1981

FILMS:

Speir AM, Rhodes GR: "Sequential In Situ Saphenous Vein Bypass with Angioscopy Assisted Valvulotomy for Multi-Level Disease in Limb Salvage". Presented at the Symposium on Spectacular Problems in Surgery. American College of Surgeons Motion Picture Library, October 25, 1988, Chicago, Illinois.

PUBLICATIONS:

- 1. Daly JM, Speir AM, Lawson M: Vascular access in chemotherapy patients <u>Internal Advances in Surgical Oncology</u>, Volume III, Alan R. Liss, Publishers, 1980, (Chapter).
- 2. Dudrick SJ, Speir AM, Englert DM: The short bowel syndrome and ambulatory home hyperalimentation. <u>Nutrition in Clinical Surgery</u>. M. Deitel ed., Williams and Wilkins, Baltimore, 1980, pp. 209-214.
- 3. Daly JM, Speir AM, Lawson M. Raaf JH: Angioaccess in cancer patients. <u>Current Problems in Cancer</u>, Volume V, Number 9, Year Book Medical Publishers, Inc., 1981.
- 4. Dudrick SJ, Speir AM, Englert DM: IVH as sole therapy for anemia and ulcerative colitis in two Jehovah's Witnesses. JPEN 3:507, 1979.
- 5. Speir AM, Dudrick SJ, Englert DM: Thirty man years with ambulatory home hyperalimentation. JPEN 3:510, 1979.
- 6. Dudrick SJ, Speir AM, Rowlands BR: Intravenous home hyperalimentation as sole therapy for anemia. Fed Proc 39:1114, 1980.
- 7. Speir AM, Grey DP, Cooley DA: Resection of the aortic arch with moderate hypothermia and temporary circulatory arrest. THI Jour 9:311, 1982.
- 8. Groom RC, Hill AC, Speir AM, Macmanus Q, Lefrak EA: Emergency portable oxygenation system revisited. Proceed Amer Acad of Cardiovasc Perfusion 4:150-153, 1983.
- 9. Hill AC, Groom RC, Smith D, Speir AM, Macmanus Q, Lefrak EA: Complement activation during cardiopulmonary bypass: Polyester versus nylon tricot in the oxygenator. Proceed Amer Acad of Cardiovasc Perfusion. 5:17, 1984.
- 10. Hill AC, Groom RC, Massimiano R, Speir AM, Macmanus Q, Lefrak EA: Hollow fiber membrane oxygenation vs. bubble oxygenation: a comparison. Proceed X Congres du C.E.C.E.C., Paris, 1984.
- 11. Hill AC, Groom RC, Vinansky R, Speir AM, Macmanus Q, Lefrak EA: Hollow fiber versus flat plate oxygenation: a comparison. Proceed XI Congres du C.E.C.E.C., Paris, 1985.
- 12. Groom RC, Hill AC, Vinansky R, Speir AM, Macmanus Q, Lefrak EA: Counterpulsation in the aortic and pulmonary positions with a left ventricular assist pump. Proceed Amer Acad of Cardiovasc Perfusion 6:163-167, 1985.
- 13. Hill AC, Groom RC, Vinansky R, Speir AM, Macmanus Q, Lefrak EA: Hollow fiber membrane oxygenation and bubble oxygenation a contrast. Proceed Amer Acad of Cardiovasc Perfusion 6:51-58, 1985.

14. Hill AC, Groom RC, Vinansky R, Speir AM, Macmanus Q, Lefrak EA: Hollow fiber membrane oxygenation and bubble oxygenation: A comparison of psychometric test results. Proceed Amer Acad of Cardiovasc Perfusion 6:70-73, 1985.

- 15. Hill AG, Groom RC, Vinansky RP, Speir AM, Macmanus Q, Lefrak EA: Pressure measurement with a disposable presure monitoring system. Proceed Amer Acad of Cardiovasc Perfusion 6:143, 1985.
- 16. Vinansky R, Hill AC, Groom RC, Speir AM, Macmanus Q, Lefrak EA: Pressure management and safety with a self-contained pressure device. Proceed Amer Acad of Cardiovasc Perfusion 7:101-104, 1987.
- 17. Groom RC, Hill AC, Vinansky R, Speir AM, Macmanus Q, Lefrak EA: Transfusion alternative: conservation and autotransfusion. Presented January 1986, Amer Acad of Cardiovasc Perfusion 7:73-77, 1986.
- 18. Hill AC, Groom RC, Vinansky R, Speir AM, Macmanus Q, Lefrak EA: Gaseous microemboli and extracorporeal circulation. Proceed Amer Acad of Cardiovasc Perfusion 7:131-137, 1986.
- 19. Hill AC, Groom RC, Vinansky R, Speir AM, Macmanus Q, Lefrak EA: The techniques of blood conservation. Proceed Amer Acad of Cardiovasc Perfusion 7:43-49, 1986.
- 20. Hill AC, Enzer S, Marino JJ, Groom RC, Vinansky R, Speir AM, Macmanus Q, Lefrak EA: Clinical experience with a new portable blood gas and electrolyte analyzer for use during cardiopulmonary bypass. Proceed Amer Acad of Cardiovasc Perfusion 8:45-51, 1987.
- 21. Hill AG, Groom RC, Vinansky RP, Marino JA, Speir AM, Lefrak EA: High frequency ventilation and prostaglandin E for respiratory insufficiency in the left ventricular assist patient. Proceed Amer Acad of Cardiovasc Perfusion 08:239, 1987.
- 22. Macmanus Q, McCabe T, Speir AM: Aortic graft pulmonary fistula fourteen years following repair of an aortic transection. Vir Med 114:356-357, 1987.
- 23. Hill AC, Groom RC, Vinansky R, Marino JJ, Speir AM, Macmanus Q, Lefrak EA: High frequency ventilation and prostaglandin E for respiratory insufficiency in the left ventricular assist patient. Proceed Amer Acad Cardiovasc Perfusion 8:239-241, 1987.
- 24. Hill AG, Tewksbury L, Groom RC, Munoz R, Marino JA, Speir AM, Lefrak EA: Utilizing the Sarns 9000 heart-lung machine in concert with the STARS data management system. Proceed Amer Acad of Cardiovasc Perfusion 9:96, 1988.
- 25. Hill AG, Groom RC, Munoz R, McGowen KJ, Marino JA, Speir AM, Lefrak EA: Cardioplegia administration and the heat exchanger. Proceed Amer Acad Cardiovasc Perfusion 11:38, 1990.
- 26. Hill AG, Groom RC, Marino JA, Munoz R, McGowen KJ, Devolder R, Speir AM, Lefrak EA: More precise heparin and protamine management during cardiopulmonary bypass. Proceed Amer Acad Cardiovasc Perfusion 11:12, 1990.

- 27. Siefert T, Speir AM: Left ventricular rupture: A collaborative approach to emergency management. AORN Jour 51(3):714-727, 1990.
- 28. Macmanus Q, Lefrak EA, Speir AM, Landolt CC, Burton NA, Akl BF, Albus RA: Coronary artery bypass surgery: Emerging trends in mortality. Vir Med 117:102-104, 1990.
- 29. Hill AC, Groom RC, Munoz R, Leone C, McGowen K, Marino JJ, Speir AM, Lefrak EA: Heat exchangers and cardioplegia administration. J of Molecular and Cellular Cardiology. 22(5):S34, 1990.
- 30. Hill AG, Hood AG, Reeder GD, Potter PS, Iverson LIG, Keating RF, Speir AM, Lefrak EA: Perioperative autologous sequestration II: a differential centrifugation technique for autologous component therapy: methods and results. Proceed Amer Acad of Cardiovasc Perfusion 14:122, 1993.
- 31. Burton NA, Lefrak EA, Macmanus Q, Hill AG, Speir AM, Akl BF, Massimiano PS: A reliable bridge to cardiac transplantation: The TCI left ventricular assist device. Ann Thorac Surg 55:1425-31, 1993.
- 32. Burton NA, Lefrak EA, Macmanus Q, Hill AG, Marino JJ, Speir AM, Akl BF, Albus RA, Massimiano PS: Improved right heart function in patients successfully bridged with the TCI LVAD. Presented at the ASAIO 39th Annual Meeting, New Orleans, April 1993.
- 33. Lefrak EA, Burton NA, Macmanus Q, Marino JJ, Hill AG, Massimiano PS, Speir AM, AKI BF, Albus RA: Technique, complications and experience with the left ventricular assist device. Presented at the World Symposium on Cardiomyoplasty, Biomechanical Assist and Artificial Heart, Paris, France, May 24-26, 1993.
- 34. Albus RA, Speir AM, Lefrak EA, Macmanus Q, Akl BF, Burton NA, Massimiano PS, Lemieux K: The effect of cost reduction strategies on mortality and morbidity in coronary artery bypass surgery. Presented at The Michael E. DeBakey International Surgical Society, May 19-21, 1994, Houston, Texas
- 35. Groom RC, Hill AG, O'Neill William, Kuban B, Akl BF, Speir AM, Konigsberg J, Sprissler, GT, Shakoor M, Massimiano PS, Burton NB, Albus RA, Macmanus Q, Lefrak, EA. Aortic cannula velocimetry. Perfusion 10:183-188, 1995.
- 36. Groom RC, Hill AG, Kurusz M, Munoz R, McGowen KJ, Resley J, Akl BF, Speir AM, Lefrak EA. Paediatric perfusion practice in North America: An Update. Perfusion 10: 393-401,1995.
- 37. Hill AG, Groom RC, Munoz R, Speir AM, Albus RA, Lefrak EA. Rescue hemostasis. In Toomsaian, Kurusz, & Stafford (eds.) <u>Case Reports:</u> <u>Clinical Studies in Extracorporeal Circulation</u>, Volume 2, Chapter 9, (pp. 62-68), The Pref Press, Houston, Texas, 1996.
- 38. Rich JB, Speir AM, Fonner E Jr; Virginia Cardiac Surgery Quality Initiative. Making a business case for quality by regional information sharing involving cardiothoracic surgery.

- 39. Barnett SD, Halpin LS, Speir AM, Albus RA, Akl BF, Massimiano PS, Burton NA, Collazo LR, Lefrak EA. Postoperative complications among octogenarians after cardiovascular surgery. Ann Thorac Surg. 2003 Sep;76(3):726-31.
- 40. Barnett SD, Halpin LS, Speir AM. Incidence of postoperative complications among coronary artery bypass patients with and without hypertension. Outcomes Manag. 2003 Jan-Mar;7(1):33-8.
- 41. Barnett SD, Halpin LS, Speir AM, Lefrak EA. Retrospective comparison of postoperative complications after cardiovascular surgery in patients aged 80 and older. J Am Geriatr Soc. 2002 Nov;50(11):1908-10.
- 42. Halpin LS, Speir AM, CapoBianco P, Barnett SD. Guided imagery in cardiac surgery. Outcomes Manag. 2002 Jul-Sep;6(3):132-7.
- 43. Barnett SD, Halpin LS, Speir AM, Lefrak E. Risk factors predicting pneumonia in patients aged 80 and older after cardiac surgery. J Am Geriat Soc. 2002 Jul;50(7):1313-4.
- 44. Ad N, Barnett SD, Speir AM. The Performance of the EuroSCORE and the Society of Thoracic Surgeons Mortality Risk Score: The Gender Factor. In review, Ann Thorac Surg, 2006.
- 45. Ad N, Barnett SD, Speir AM, et al. The Impact of Prosthetic Patient Mismatch On Outcome Following Aortic Valve Replacement Is More Significant In High Risk Group Of Patients As Defined By The EuroSCORE. In review, J Thor Cardiovasc Surg 2006.

PRESENTATIONS:

"Transection of the Descending Thoracic Aorta Secondary to Blunt Thoracic Injury", Presented to the South Texas Chapter of the American College of Surgeons, Temple, Texas, February 2, 1980.

"Chemotherapy Via Angioaccess Grafts", Presented to the Chief Residents Conference, Society for University Surgeons, Houston, Texas, February 4, 1980.

"Thirty Man Years Experience with Ambulatory Home Hyperalimentation", Presented to the American Society of Parenteral and Enteral Nutrition, Chicago, Illinois, February 1, 1980.

"IVH as Sole Therapy for Anemia and Ulcerative Colitis in Two Jehovah's Witnesses", Presented to the Federation of American Society for Experimental Biology, 64th Annual Meeting, Anaheim, California, March 17, 1980.

"Update on Cardiovascular Surgery", Presented to the Northern Virginia Consortium for Continuing Medical Education, Arlington, Virginia, February 2, 1983.

"State of the Art of Cardiac Surgery", Loudoun Hospital Center, Leesburg, Virginia, July 13, 1984.

"Sequential In situ Saphenous Vein Bypass with Angioscope Assisted Valvulotomy for Multi-level Disease in Limb Salvage", Videotape presented at the Symposium on Spectacular Problems in Surgery, American College of Surgeons, October 25, 1988.

"Surgical Interventions in Cardiothoracic Disease", Cardiothoracic Nursing Course, National Naval Medical Center, Bethesda, Maryland, September 14, 1989.

"Surgery of the Aorta, Dissection, Trauma & Aneurysm", Northern Virginia Doctors Hospital, Department of Medicine, Arlington, Virginia, November 27, 1990.

"Heart Surgery in Uganda", Mended Hearts, November 3, 1990.

"Current Controversies in Aortic and Mitral Valve Surgery", Shady Grove Hospital Medical Staff, July 11, 1991.

"Thoracic and Aortic and Ventricular Aneurysms", Cardiothoracic Surgical Nursing Course, National Naval Medical Center, October 7, 1991.

"Ascending Aortic Aneurysms", Fairfax Hospital Seminar on Advances in Practices in Cardiac Surgery, February 23, 1992.

"Aortic Dissection" - Potomac Hospital Emergency Room Medical Staff November 30, 1992

"Improved Right Heart Function in Patients Successfully Bridged with the TCI LVAD" Presented at the ASAIO 39th Annual Meeting, New Orleans, April 1993.

"Technique, complications and experience with the left ventricular assist device" Presented at the World Symposium on Cardiomyoplasty, Biomechanical Assist and Artificial Heart, Paris, France, May 24-26, 1993.

"Hypothermia and Normothermia Myocardial Metabolism" - American Society for Extracorporeal Technology - Raleigh, North Carolina, October 3, 1993

"The Effect of Cost Reduction Strategies on Mortality and Morbidity in Coronary Artery Bypass Surgery" Presented at The Michael E. DeBakey International Surgical Society, May 19-21, 1994, Houston, Texas

"Vascular Disease: State of the Art 1995" - Fairfax Hospital, November 4, 1995

PEER-REVIEWED PUBLICATIONS:

Halpin LS, Speir AM, CapoBianco P, Barnett SD. Guided imagery in cardiac surgery. Outcomes management for nursing practice, 2002;6(3):132-137.

Barnett SD, Halpin LS, Speir AS, Lefrak EA. Risk factors predicting pneumonia among octogenarians following cardiac surgery. J Am Geri Soc, 2002;50(7):1313

Barnett SD, Halpin LS, Speir AS, Lefrak EA. Retrospective comparison of postoperative complications following cardiovascular surgery among octogenarians. In press, J Am Geri Soc, 2002

Barnett SD, Halpin LS, Speir AM. Retrospective comparison of the incidence of postoperative complications among two groups of first time, elective coronary artery bypass patients with and without hypertension. Outcomes Management for Nursing Practice. In press, 2003;7(1).

Barnett SD, Halpin LS, Speir AM, Albus RA, Akl B, et al. Postoperative complications among octogenarians following cardiovascular surgery. In review, Annals of Thoracic Surg, 2002.

PUBLISHED ABSTRACTS:

Barnett SD, Halpin LS, Speir AM. Pneumonia in the octogenarian cardiac surgery patient. American Heart Journal, 2002. (No. 59)

Nathan SD, Wohlrab J, Barnett SD. Retrospective validation of BOS-p as a predictor of BOS in single lung transplant recipients. J Heart Lung Transpl 2002;21(1):55-188, (No. 60)

Halpin LS, Barnett SD, Speir AM, Lefrak E. Continued quality of life in the elderly one and two-years postcardiac surgery. J Am Geri Soc. 2002;50(4);S176 (No. 507)

Halpin LS, Barnett SD, Speir AM, Lefrak E. Is preoperative state of mind among elderly patients undergoing a coronary artery bypass graft (CABG) predictive of increased postoperative length of stay? Am Ger Soci. 2002;50(4);S175 (No. 506)

Barnett SD, Fonner E, Rich J, Ad N, Speir A. Summary results of the VCSQI: Valve replacement costs and mortality. Am J Epidem 2006; 163: S025.

Ad N, Speir AM, Hunt SL, Lefrak EA, Rongione AJ, Barnett S. Is Serum Creatinine < 2.0 mg/dL Sensitive Enough to Predict Adverse Outcomes Following Coronary Artery Bypass Grafting? Another look at the role of Glomerular Filtration Rate. Chest 2006, 187S

Ad N, Speir AM, Burton NA, Collazo L, Barnett SD. The Performance of the EuroSCORE and the Society of Thoracic Surgeons Mortality Risk Score: The Gender Factor. Chest 2006; 122S

Ad N, Barnett SD, Hunt S, Fitzgerald D, Speir AM. The use of aprotinin in cardiac surgery is associated with increased risk of renal failure and neurological events. Circulation 2006 [No. 2325].

POSTER PRESENTATIONS;

1. Barnett SD, Halpin LS, Speir, AM. Pneumonia in the octogenarian cardiac surgery patient presented at the 3rd Scientific Forum on Quality of Care and Outcomes Research in

- Cardiovascular Disease, Washington DC, Sept 30 Oct 1, 2001. (No 133, oral)
- 2. Halpin LS, Barnett SD, Speir AM, Lefrak E. Continued quality of life in the elderly one and two-years post cardiac surgery. 2002 Annual meeting, American Geriatrics Society, Washington, DC, May 18-24. (No 506)
- 3. Halpin LS, Barnett SD, Speir AM, Lefrak E. Is preoperative state of mind among elderly patients undergoing coronary artery bypass graft (CABG) predictive of increased postoperative length of stay? 2002 Annual meeting, American Geriatrics Society, Washington, DC, May 18-24. (No. 507)
- 4. Ad N, Barnett SD, Henry LL, Hunt SL, Speir AM. The Association Between Body Mass Index, Perioperative Complications, Health-Related Quality of Life, and Intermedicate-Term Survival Following Cardiac Surgery. The 94th Annual Clinical Congress of the American College of Surgeons, San Francisco, California, October 2008
- 5. Halpin L, Henry LL, Barnett SD, Hunt SL, Black S, Ad N, Lamberti J, Speir AM. The Use of Preoperative Spirometry to Define the Degree of Pulmonary Disease. Advances In Quality and Outcomes: A Data Managers Meeting, The Society of Thoracic Surgeons, Lake Buena Vista, Florida, October 2008

http://www.cvtsa.com/Cardiac/C-412.html