

# CURRICULUM VITAE

## J. SCOTT RANKIN, M.D.

### **Born**

Oakland Naval Hospital, Oakland, California, June 9, 1947

### **Family**

Sue Dean Batson, J.D. Married, June 20, 1967

B.A. Duke University, honors, 1975

J.D. Duke University, honors, 1978

James Scott Rankin, Jr. J.D. Born April 28, 1968

B.A. Duke University, honors, 1990

J.D. Emory University Law School, honors, 1993

Full Partner, Parker, Hudson, Rainer, and Dobbs LLP, Atlanta, GA

John Todd Rankin Born January 20, 1970

B.S. Duke University, 1992

Alan Batson Rankin, M.D. Born April 6, 1972

B.S. Duke University, 1994

M.D. University of Tennessee, honors, 1999

Internal Medicine Residency, University of Oregon, 2002

Susan Elizabeth Rankin Born September 13, 1979

B.A. Boston University, honors, Valedictorian, 2000

M.B.A. NYU, honors, 2006

Anne Batson Rankin Born December 1, 1981

B.A. University of Tennessee, honors, 2004

M.S.R.N. Vanderbilt University, 2007

Carl Robert Rankin Born September 29, 1983

B.S. James Madison University, 2006

PhD Candidate Graduate Student, Emory, Univ.

Helen Bonevie Rankin Born June 17, 1987

Honor student, Harpeth Hall Upper School, Class of 2005

B.S. Duke University, 2009, Honors, Dean's List

### **Address**

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**Education**

B.S. Middle Tennessee State University, 1966

M.D. University of Tennessee, 1969

**Medical Licensure(past and present)**

Tennessee #MD007033, issued 1970 and reissued 1993

California #A050518, issued 1990

North Carolina #25407, issued 1974

Michigan #031904, issued 1972

**Professional Organizations (past and present)**

American Physiological Society

Fellow, Council on Circulation, American Heart Association

Fellow, Council on Cardiovascular Surgery, American Heart Association

Fellow, American College of Surgeons

Fellow, American College of Cardiology

Fellow, American College of Chest Physicians

Cardiovascular System Dynamics Society

American Association for Thoracic Surgery

Society of University Surgeons

Society of Thoracic Surgeons

American College of Surgeons, Advisory Council on Cardiothoracic Surgery

The Sabiston Society

**Editorial Boards**

Journal of Surgical Research (1985 1989)

Journal of Thoracic and Cardiovascular Surgery (1989 1991)

Circulation Research (1989 1991)

Ad Hoc Reviewer to present

J Thorac Cardiovasc Surg, Andrew S. Wechsler, M.D., Editor

Ann Thorac Surg, L. Henry Edmunds, Jr., M.D., Editor

Am Heart J, Robert M. Califf, M.D., Editor

Journal of Heart Valve Disease, Endre Bodnar, M.D., Editor

Circulation, James T. Willerson M.D., Editor

(32 reviews completed over past 2-years)

**Professional Awards**

National Cancer Institute Fellowship, 1970

National Research Service Award, 1974 1976

Whitaker Foundation Fellowship, 1980 1983

John A. Hartford Foundation Fellowship, 1981 1984

Sigma XI, 1984  
NIH Research Grant R01 HL29436, 1982-1993  
NIH Research Grant R01 HL17670, 1983-1990  
UCSF Excellence in Teaching Award 1991-1992  
Who's Who in American Medicine  
Best Doctors in America

#### **NIH Activities**

Ad Hoc Member, Surgery and Bioengineering Study Section, October 1988.  
Full Member, Surgery and Bioengineering Study Section, July 1989-June 1990. NHLBI, Bypass Angioplasty Revascularization Investigation (BARI Trials) Committee Memberships: Steering, Surgical, Policy and Publication, Operations, and Angiographic. Site visits include: New York University/Bellvue Hospital, 17 February, 1989. Prague Czechoslovakia, Institut Klinicke a Experimentalni Mediciny, 24 February-1 March, 1989. Maine Medical Center, Portland, Maine, 29 March, 1989. Reviewers Reserve NRR) July 1, 1990-June 30, 1994. Clinical Trials Study Section, 2001. DSMB, Stitch Trial, 2002-present. DSMB, BARI 2D Trial, 2004-present.

#### **Society of Thoracic Surgeons Activities**

Workforce on National Databases, 2007-Present  
Access and Publications Committee, 2007-Present  
Quality Measures Task Force, 2008-Present

#### **American Board of Thoracic Surgery Activities**

SESATS III Committee, 1985  
SESATS IV Committee, 1989

#### **Patents**

An Intra-annular Hemispherical Mounting Frame for Aortic Valve Repair (Valve Repair Technologies, LLC), currently under review by US Patent Office, Serial No. 11/799,942  
Prepared for patent application by Waddey & Patterson, P.C., Nashville, TN

#### **Industry-Funded Grants**

A Prospective Trial of Immune Augmentation for Antibiotic-Refractory Pneumonia after Adult Cardiac Surgery: The "Immune Boost After Cardiac Surgery" (IBACS) Trial  
J. Scott Rankin, MD, Principal Investigator  
Submitted to Bayer Pharmaceuticals

#### **Professional Experience**

1970 National Cancer Institute Fellowship  
1970-1972 Intern and First Year Surgical Resident  
Department of Surgery, University of Alabama Hospital, Birmingham, Alabama  
John W. Kirklin MD, Chairman  
1972-1974 General Surgeon, USAF  
Wurtsmith AFB, Michigan

1974 - 1976 Instructor and Research Fellow  
Department of Surgery, Duke University Medical Center, Durham, North Carolina  
Robert W. Anderson MD, Supervisor

1976 - 1980 Senior Assistant Resident, Chief Resident  
Department of Surgery, Duke University Medical Center, Durham, North Carolina  
David C. Sabiston Jr. MD, Chairman

1980 - 1981 Teaching Scholar in Cardiac Surgery, Duke University Medical Center,  
Durham, North Carolina

1981 - 1986 Assistant Professor  
Department of Surgery, Duke University Medical Center, Durham, North Carolina

1981 - 1990 Assistant Professor  
Department of Physiology, Duke University Medical Center, Durham, North Carolina

1986 - 1990 Associate Professor  
Department of Surgery, Duke University Medical Center, Durham, North Carolina

1990 - 1993 Professor of Surgery, Chief of the Division of Cardiothoracic Surgery  
University of California San Francisco, San Francisco, California

1990 - 1993 Senior Staff Member, Cardiovascular Research Institute  
University of California San Francisco, San Francisco, California

1993-2006 Attending Surgeon  
Saint Thomas Hospital, and Baptist Hospital, Nashville, Tennessee

1993-Present Clinical Associate Professor  
Department of Cardiac Surgery, Vanderbilt University Medical Center  
Nashville, Tennessee

1994-Present Attending Surgeon  
Centennial Medical Center, Nashville, Tennessee

1996-Present Partner, Cardiothoracic Surgery Associates, PLLC

### **Board Certification**

American Board of Surgery, December 13, 1982, #28299  
American Board of Thoracic Surgery, May 16, 1987, #4580  
American Board of Surgery Recertification 1993, 2003, #28299  
American Board of Thoracic Surgery Recertification 1997, 2007, #4580

### **Research Interests**

Basic cardiovascular physiology and cardiovascular surgical research with emphasis on ventricular function and coronary blood flow. Clinical research related to the surgical treatment of ischemic and valvular heart diseases as well as thoracic aortic disease, with special emphasis on ventricular function, bypass graft and valvular performance, cardiac valve repair, internal mammary artery grafting, unstable angina, aortic dissections, and biostatistical analysis of long term surgical results.

### **Invited Lectureships, Program Chairmanships, and Visiting Professorships**

1. Lecturer, "The Chamber Dynamics of the Intact Left Ventricle". Delivered at the Third International Conference of the Cardiovascular System Dynamics Society, University of Leiden, The Netherlands. August, 1978.
2. Lecturer, "Relaxation and Filling of the Heart". Delivered at the Fifth Workshop on Contractile Behavior of the Heart, University of Antwerp, Belgium. September 25, 1979.
3. Lecturer, Departments of Cardiology and Physiology, University of California, San Francisco, December 12, 1979: "New models of diastolic and systolic cardiac function".
  4. Chairman, Ventricular Function Session, 53rd Scientific Sessions, American Heart Association, Miami Beach, Florida, November, 1980.
5. Lecturer, Departments of Cardiology and Physiology, The Johns Hopkins University, Baltimore, December 12, 1980: "the diastolic properties of the intact left ventricle".
6. Chairman, Ventricular Function Session, 54th Scientific Sessions, American Heart Association, Dallas, November, 1981.
7. Lecturer, New Concepts in Cardiopulmonary Resuscitation, Departments of Medicine and Surgery, University of Toronto, October 5 6, 1983.
8. Lecturer, New Models for Assessment of Systolic Myocardial Function in Valvular Heart Disease. The Symposium of the European Society of Cardiology, University Hospital, Zurich, Switzerland, April 12, 1984.
9. Lecturer, Determinants of Diastolic Chamber Compliance in the Normal and Diseased Left Ventricle. The Symposium of the European Society of Cardiology, University Hospital, Zurich, Switzerland, April 12, 1984.
10. Lecturer, The Surgical Treatment of Ischemic Heart Disease Associated with Impaired Left Ventricular Function. Postgraduate course in cardiac surgery at the 71st Annual Clinical Congress of the American College of Surgeons, Chicago, October, 1985.
11. Lecturer, Current Trends in Surgical Therapy for Ischemic Heart Disease. The Brompton Hospital, London, England, August, 1985.
12. Visiting Professor, Departments of Surgery and Medicine, Georgetown University, January, 1986.
13. Lecturer, International Symposium on Physiology of Diastole in Health and Disease, Beth Israel Hospital, Boston, September 1986.

14. Lecturer, Assessing Functional Reserves of Left Ventricle. The 59th Scientific Session of the American Heart Association, Dallas, November 1986.
15. Chairman, Ventricular Function Session, 36th Scientific Session, American College of Cardiology, New Orleans, March 17, 1987.
16. Lecturer, Cardiac Arrest: New Insights in Management. The 60th Scientific Session of the American Heart Association, Anaheim, California, November, 1987.
17. Lecturer, Postinfarction Mitral Insufficiency. State of the Art Symposium on Coronary Arterial Surgery sponsored by the Council on Cardiovascular Surgery, American Heart Association, Dallas, May 1988.
18. Lecturer, Surgical Management of Acute Myocardial Infarction Complicated by Early Mitral Regurgitation. Postgraduate course in cardiac surgery at the 74th Clinical Congress, American College of Surgeons, Chicago, October, 1988.
19. Moderator and Lecturer, postgraduate seminar: Cardiac Valve Repair. The 61st Scientific Session of the American Heart Association, Washington, DC, November 1988.
20. Lecturer, New Concepts in the Management of Ischemic Mitral Incompetence. At the International Conference on Ischemic Mitral Incompetence, Berlin, West Germany, 2 4 December, 1988.
21. Visiting Professor, University of Pennsylvania, Philadelphia, 20 22 January, 1989: "An energetic model of cardiac performance".
22. Discussant, Oxygen Utilization in Postischemic Stunned Myocardium, American Association for Thoracic Surgeons 69th Annual Meeting, Boston, MA, 8 11 May, 1989.
23. Lecturer, Techniques and Benefits of Multiple Mammary Artery Bypass Procedures. Panelist, Workshops on Operative Technique. The American College of Cardiology. Duke University Medical Center, Durham, NC, 25 27 May 1989.
24. Lecturer, Dysfunction of the Heart in Contraction and Relaxation. Panelist, Ischemic Heart Disease and Interventional Cardiology. Society of Critical Care Medicine, New Orleans, 5 9 June, 1989.
25. Chairman, 1989 American Heart Association Plenary Session. Unstable Angina. New Orleans, Louisiana, November, 1989.
26. Society of Critical Care Medicine, Las Vegas, March 12 15, 1990: "Postoperative hemodynamic management".

27. Lecturer, New Concepts in Surgery for Valvular Heart Disease. Northern California Chapter, Inc., American College of Surgeons. San Francisco, California, May 11, 1991.
28. Lecturer, Coronary Artery Bypass Graft Surgery--The Randomized Trials and Beyond. Delivered at the American College of Chest Physicians Postgraduate Course, San Francisco, California, November 4, 1991.
29. Lecturer, Valve Repair vs Replacement. Delivered at the 57th Annual Scientific Assembly of the American College of Chest Physicians, San Francisco, California, November 6, 1991.
30. Lecturer, Recent Advances in Surgery for Valvular Heart Disease. Delivered at the 8th Annual Advances in Heart Disease , San Francisco, California, December 14, 1991.
31. Lecturer, Transesophageal Echocardiography in Adult Cardiac Surgery. Delivered at the 5th International Symposium of Echocardiography in Cardiac Surgery, Vienna, Austria, July 1992.
32. Lecturer, Cardiac Valve Repair. Delivered at the 5th International Symposium of Echocardiography in Cardiac Surgery, Vienna, Austria, July 1992.
33. Lecturer, Surgical Management of Ischemic Mitral Regurgitation. Visiting Professorship at the University of Texas Southwestern Medical Center. Dallas, Texas, November 13, 1992.
34. Lecturer, Current Techniques and Results of Cardiac Valve Repair. Visiting Professorship at the University of Texas Southwestern Medical Center. Dallas, Texas, November 14, 1992.
35. Lecturer and participant, Surgical Management of Cardiac Rupture. Cardiovascular Conference 65th Scientific Session of the AHA. New Orleans, Louisiana, November, 1992.
36. Lecturer, "Quantitative Analysis of Left Ventricular Function". Cardiac Surgery Biology Club, AATS. Chicago, Illinois, April 25, 1993.
37. Lecturer, "New Concepts in Cardiac Valve Repair". Vanderbilt University Surgical Grand Rounds. Nashville, Tennessee, January 14, 1995.
38. Lecturer, ACS 2003, Chicago, Ill: "Adjustable artificial chordal replacement for repair of mitral valve prolapse", October, 2003.

39. Lecturer, STS 2004: "Repair of mitral prolapse due to Barlow's syndrome using artificial chordal replacement".
40. Lecturer, "William Stewart Halsted". Vanderbilt History of Medicine Lecture, Nashville, Tennessee, November 9, 2004.
41. Lecturer, "New concepts in mitral valve repair", Vanderbilt University Surgical Grand Rounds. Nashville, Tennessee, January 5, 2005.
42. Lecturer, STS 2005, Tampa Florida: "Adjustable artificial chordal replacement for isolated posterior leaflet prolapse".
43. Lecturer, SHVD 2005, Vancouver, BC: "Techniques and benefits of mitral valve repair in ischemic mitral regurgitation".
44. Lecturer, WTSA 2005: "The determinants of operative mortality in valvular heart surgery".
45. Presenter, Paper #10, STS 2006: "Benefits and techniques of multiple internal mammary artery bypass at 20-years of followup".
46. Presenter: Centennial Heart Center Meeting. "Techniques of Aortic Root Enlargement". 4/6/06.
47. Lecturer, Vanderbilt Grand Rounds, September 6, 2006: A prospective randomized trial of IVIG for antibiotic-refractory pulmonary infection after adult cardiac surgery.
48. Lecturer, CarboMedics Valve Symposium, Las Vegas, Oct 22, 2006: "Mitral valve repair in ischemic mitral regurgitation".
49. Visiting Professor, Department of Cardiothoracic Surgery, The Mount Sinai Medical Center, New York, New York, January 24, 2007. Lecture: "Improving the Results of Cardiac Valvular Surgery".
50. Presenter: "I wish that king would hurry up and get in here". Retirement dinner for Dr. Walter G. Wolfe, Duke University, February 19, 2007.
51. Presenter: "Recent Advances in Adult Cardiac Surgery". Parkway Cardiology, Oak Ridge TN. 3/6/07.
52. Presenter. "Cardiac Surgery Data Management". To Dr. Jon Perlin and the automated medical record team at Corporate HCA. 3/8/07.

53. Presenter: "Practice Opportunities in Cardiology and Cardiac Surgery". Centennial Heart Cardiology Consultants. Centennial Medical Center, Nashville, TN, 3/13/07.
54. Presenter: CTS Critical Care Meeting, Washington DC, March 22, 2007: "Mediastinitis and Sternal Dehiscence: Latest Prevention and Management".
55. Presenter: CTS Critical Care Meeting, Washington DC, March 22, 2007: "Innovative Immunotherapy for Pulmonary Infection".
56. Presenter: Sorin 2007 AATS Symposium on Valve Repair, Washington DC, Corcoran Art Gallery, May 5, 2007: "Expanding the Applicability of Mitral and Tricuspid Valve Repair".
57. Presenter: 2007 SHVD meeting NY, NY, June 16, 2007: The Risk of Endocarditis Surgery in Dialysis-Dependent Renal Failure.
58. Session Chairman: 2007 SHVD meeting NY, NY, June 16, 2007: Heart Valve Repair II.
59. Presenter: 2007 SHVD meeting NY, NY, June 17, 2007: A "Hemispherical" model of aortic valve geometry.
60. Presenter: 2007 AHA meeting CV symposium on "New techniques of mitral valve repair", Invited lecture entitled "Artificial chordal replacement for repair of mitral valve prolapse". Orlando, Fl, 11/4/07.
61. Presenter: 2007 Tennessee Perfusionist Association meeting. "Is prosthetic replacement of the mitral valve obsolete? September 8, 2007.
62. Invited Discussant, paper 44, STSA meeting, Bonita Springs, Fl, 11/10/07.
63. Nursing Lecture, CMC, "Aortic Dissection", 10/30/07.
64. Lecturer, Cardiothoracic Critical Care 2008, Washington DC, March 27, 2008. "Prevention and clinical management of arrhythmias after adult cardiac surgery".
65. Lecturer, CMC Nurses, 4/21/08. "Management of pacemakers and postoperative arrhythmias".
66. Lecturer, Focus on heART, 2008 TriStar Cardiovascular Symposium, April 26. 2008, Frist Art Museum, Nashville TN. "New horizons in cardiac valve repair".

## ORIGINAL SCIENTIFIC PUBLICATIONS

1. Rankin JS, Pate JW, Richardson RL: Normothermic cardiac preservation. *Circulation* 41&42 (suppl III):186, 1970.
2. Rankin JS, Nicholas LM, Kouchoukos NT: Effects of chronic left ventricular atrial regurgitation on left ventricular function before and after elimination of regurgitation. *Circulation* 45&46 (suppl II):361, 1972.
3. Rankin JS, Arentzen CE, Anderson RW, McHale PA: Viscoelastic properties of the diastolic left ventricle. *Circulation* 51&52 (suppl II):131, 1975.
4. Arentzen CE, Rankin JS, Anderson RW, Anderson PAW: Determinants of the force frequency relationship in the intact left ventricle. *Circulation* 51&52 (suppl II):596, 1975.
5. Hammon JW Jr, Rankin JS, Arentzen CE, Anderson PAW, Anderson RW: The force frequency relationship in the intact canine right ventricle. *Circulation* 51&52 (suppl II):765, 1975.
6. McHale PA, Rankin JS, Greenfield JC Jr: The relationship between coronary pressure distal to a stenosis and distribution of transmural blood flow. *Circulation* 51&52 (suppl II):851, 1975.
7. Rankin JS, Nicholas LM, Kouchoukos NT: Experimental mitral regurgitation: effects on left ventricular function before and after elimination of chronic regurgitation in the dog. *J Thorac Cardiovasc Surg* 70:478 88, 1975.
8. Fleming ID, Barnawell JR, Burlison PE, Rankin JS: Skin cancer in black patients. *Cancer* 35:600 5, 1975.
9. McHale PA, Rankin JS, Greenfield JC Jr: Measurement of coronary artery blood pressure distal to a stenosis and transmural distribution of blood flow. *Fed Proc* 35:782, 1976.
10. Anderson RW, Arentzen CE, Edwards CH, McHale PA, Rankin JS: Effects of airway pressure on left ventricular function in the unanesthetized dog. *Circulation* 54 (suppl II):601, 1976.
11. Rankin JS, Arentzen CE, McHale PA, Ling D, Greenfield JC Jr, Anderson RW: The dynamic geometry of the left ventricle in the conscious dog. *Circulation* 54 (suppl II):600, 1976.

12. Ling D, Rankin JS, Edwards CH, McHale PA, Arentzen CE, Anderson RW: Regional diastolic pressure dimension characteristics of the left ventricle in the conscious dog. *Circulation* 54 (suppl II):134, 1976.
13. Anderson PAW, Manring A, Arentzen CE, Rankin JS, Johnson EA: Cardiac hypertrophy and the force interval relationship. *Circulation* 54 (suppl II):123, 1976.
14. Rankin JS, McHale PA, Greenfield JC Jr: Nonobstructive chronic cannulation of the left circumflex coronary artery of the dog. *J Appl Physiol* 40:263 5, 1976.
15. Rankin JS, McHale PA, Arentzen CE, Ling D, Greenfield JC Jr, Anderson RW: The three dimensional dynamic geometry of the left ventricle in the conscious dog. *Circ Res* 39:304 13, 1976.
16. Anderson PAW, Rankin JS, Arentzen CE, Anderson RW, Johnson EA: Evaluation of the force frequency relationship as a descriptor of the inotropic state of canine left ventricular myocardium. *Circ Res* 39:832 9, 1976.
17. Arentzen CE, Rankin JS, Anderson PAW, Anderson RW: Determinants of postextrasystolic potentiation in the intact left ventricle. *Surg Forum* 27:270 2, 1976.
18. Edwards CH II, Rankin JS, Ling D, McHale PA, Anderson RW: Effects of ischemia on left ventricular regional function in conscious dogs. *Surg Forum* 27:237 9, 1976.
19. Edwards CH II, Marsicano TH, Rankin JS, Anderson RW: Alteration in the material properties of myocardium following ischemia: A creep phenomenon. *Circulation* 56 (suppl III):577, 1977.
20. Rankin JS, Ring WS, Arentzen CE, Ling D, McHale PA, Anderson RW: The functional reserves of the left ventricle in chronic volume overload. *Circulation* 56 (suppl II):906, 1977.
21. Rankin JS, Arentzen CE, McHale PA, Ling D, Anderson RW: Viscoelastic properties of the diastolic left ventricle in the conscious dog. *Circ Res* 41:37 45, 1977.
22. Anderson PAW, Manring A, Arentzen CE, Rankin JS, Johnson EA: Pressure induced hypertrophy of cat right ventricle: an evaluation with the force interval relationship. *Circ Res* 41:582 8, 1977.
23. Rankin JS, Ring WS, Arentzen CE, McHale PA, Anderson RW: The effects of dilatation and hypertrophy on the diastolic mechanics of the left ventricle during chronic volume overload. *Circulation* 57&58 (suppl II):II 148, 1978.

24. Arentzen CE, Rankin JS, Anderson PAW, Feezor MD, Anderson RW: Force frequency characteristics of the left ventricle in the conscious dog. *Circ Res* 42:64 71, 1978.
25. Ling D, Rankin JS, Edwards CH II, McHale PA, Arentzen CE, Anderson RW: Regional diastolic mechanics of the left ventricle in the conscious dog. *Am J Physiol* 236:H323 30, 1979.
26. Mirsky I, Rankin JS: The effects of geometry, elasticity, and external pressures on the diastolic pressure volume and stiffness stress relations: How important is the pericardium? *Circ Res* 44:601 11, 1979.
27. Olsen CO, Van Trigt P III, Pellom GL, Jones RN, Peyton RB, Feezor MD, Rankin JS, Wechsler AS: Determinants of interventricular septal shifting in conscious dogs. *Circulation* 62 (suppl III):246, 1980.
28. Van Trigt P III, Olsen CO, Pellom GL, Peyton RB, Jones RN, Feezor MD, Rankin JS, Wechsler AS: Do acute hemodynamic interventions alter diastolic mechanics of the left ventricle? *Circulation* 62 (suppl III):778, 1980.
29. Rankin JS, Arentzen CE, Ring WS, Edwards CH III, McHale PA, Anderson RW: The diastolic mechanical properties of the intact left ventricle. *Fed Proc* 39:141 7, 1980.
30. Rankin JS, Olsen CO: The diastolic filling of the left ventricle. *Eur Heart J* 1:95 105, 1980.
31. Rankin JS: The chamber dynamics of the intact left ventricle. In: *Cardiac dynamics*. Baan J, Arntzenius A, Yellin E, eds. London: Martinus Nijhoff Publishers, 1980.
32. Rankin JS, Sabiston DC Jr: The surgical treatment of ischemic heart disease. In: *Hearts and heart like organs*. Bourne GH, ed. New York: Academic Press, Vol. 3: 287 348, 1980.
33. Olsen CO, Van Trigt P, Pellom GL, Wechsler AS, Rankin JS: Alterations in left ventricular geometry during inspiration in the conscious dog. *Am J Card* 47:411, 1981.
34. Tyson GS, Olsen CO, Davis JW, Rankin JS, Sabiston DC Jr: Quantification of pericardial influences on diastolic filling of the left ventricle. *Am J Card* 47:411, 1981.
35. Van Trigt P, Olsen CO, Pellom GL, Peyton RB, Jones RN, Rankin JS, Wechsler AS: The effect of Verapamil on diastolic mechanics of the left ventricle. *Am J Card* 47:411, 1981.
36. Olsen CO, Tyson GS, Van Trigt P, Maier GW, Davis JW, Rankin JS: Effects of interventricular septal shifting on left ventricular function in the conscious dog. *Circulation* 64 (suppl IV):794, 1981.

37. Maier GW, Olsen CO, Tyson GS, Davis JW, Rankin JS, Sabiston DC Jr: The physiology of external cardiac massage in the intact dog. *Circulation* 64 (suppl IV):1159, 1981.
38. Tyson GS, Maier GW, Olsen CO, Davis JW, Sethi GK, Scott SM, Sabiston DC Jr, Rankin JS: Dimensional analysis of ventricular function after cardiac surgery in man. *Circulation* 64 (suppl IV):765, 1981.
39. Rankin JS, Olsen CO, Tyson GS, Maier GW, Davis JW, Sabiston DC Jr: Effects of airway pressure on cardiac function in intact dogs and man. *Circulation* 64 (suppl IV):957, 1981.
40. Olsen CO, Lee KL, Tyson GW, Maier GW, Davis JW, McHale PA, Rankin JS: Anisotropic mechanical properties of the left ventricle in the conscious dog. *Circulation* 64 (suppl IV):656, 1981.
41. Edwards CH II, Rankin JS, McHale PA, Ling D, Anderson RW: Effects of ischemia on left ventricular regional function in the conscious dog. *Am J Physiol* 240:H413 20, 1981.
42. Olsen CO, Van Trigt P, Rankin JS: Dynamic geometry of the intact left ventricle. *Fed Proc* 40:2023 30, 1981.
43. Chitwood WR Jr, Rankin JS, Bollinger RR, Moylan JA: Brachial artery reconstruction using the heparin bonded Sundt shunt. *Surgery* 89:355 58, 1981.
44. Van Trigt P, Bauer BJ, Olsen CO, Rankin JS, Wechsler AS: An improved transducer for measurement of cardiac dimensions with sonomicrometry. *Am J Physiol* 240:H664 8, 1981.
45. Olsen CO, Rankin JS, Arentzen CE, Ring WS, McHale PA, Anderson RW: The deformational characteristics of the left ventricle in the conscious dog. *Circ Res* 49:843 55, 1981.
46. Rankin JS, Sabiston DC Jr: Physiologic determinants of coronary blood flow, cardiac metabolism, and intraoperative myocardial protection. In: *A textbook of surgery*, 12th edition. Sabiston DC Jr, ed. Philadelphia: W.B. Saunders Company, 1981.
47. Olsen CO, Tyson GS, Maier GW, Davis JW, Greenfield JC Jr, Rankin JS: Mechanism of decreased left ventricular stroke volume during inspiration in the conscious dog. *Am J Cardiol* 49:1049, 1982.

48. Tyson GS, McIntyre RW, Maier GW, Kernstine KH, Olsen CO, Evans RF, Davis JW, Rankin JS: The mechanical effects of high frequency ventilation on cardiac function in intact dogs. *Crit Care Med* 10:212, 1982.
49. Kernstine KH, Tyson GS Jr, Maier GW, Olsen CO, Davis JW, Rankin JS: Determinants of direct cardiac compression during external cardiac massage in intact dogs. *Crit Care Med* 10:231, 1982.
50. Murrah RL, McIntyre RW, Maier GW, Olsen CO, Tyson GS Jr, Davis JW, Rankin JS: Mechanical correlates of the third heart sound. *Circulation* 66 (suppl II):846, 1982.
51. Tyson GS Jr, McIntyre RW, Olsen CO, Davis JW, Rankin JS: Analysis of the end systolic pressure volume relationship in conscious dogs. *Circulation* 66 (suppl II):1003, 1982.
52. Maier GW, Tyson GS Jr, Kernstine KH, Olsen CO, Davis JW, Sabiston DC Jr, Rankin JS: Coronary blood flow during high impulse external cardiac massage. *Circulation* 66 (suppl II):672, 1982.
53. McIntyre RW, Tyson GS Jr, Olsen CO, Murrah RL, Davis JW, Rankin JS: Sono micrometric evaluation of post operative cardiac function. *Proceedings American Society of Anesthesiologists*, 1982. *Anesthesiology* 57 (suppl 3):A179, 1982.
54. Rankin JS, Olsen CO, Arentzen CE, Tyson GS, Maier GW, Smith PK, Hammon JW Jr, Davis JW, McHale PA, Anderson RW, Sabiston DC Jr: The effects of airway pressure on cardiac function in intact dogs and man. *Circulation*: 66:108 20, 1982.
55. Filston HC, Rankin JS, Kirks DR: The diagnosis and treatment of primary and recurrent tracheoesophageal fistulas: value of selective catheterization. *J Pediatr Surg* 17:144 8, 1982.
56. Smith PK, Tyson GS Jr, Hammon JW Jr, Olsen CO, Hopkins RA, Maier GW, Sabiston DC Jr, Rankin JS: Cardiovascular effects of ventilation with positive expiratory airway pressure. *Ann Surg* 195:121 30, 1982.
57. Tyson GS Jr, Olsen CO, Maier GW, Davis JW, Sethi GK, Scott SM, Sabiston DC Jr, Rankin JS: Dimensional characteristics of left ventricular function after coronary artery bypass grafting. *Circulation* 66 (suppl I):116 25, 1982.
58. Maier GW, Tyson GS Jr, Kernstine KH, Olsen CO, Davis JW, Sabiston DC Jr, Rankin JS: Optimal techniques of external cardiac massage. *Surg Forum* 33:282 285, 1982.

59. Sink JD, Spray TL, Rankin JS: Hemophilus influenza pericarditis. Clin Cardiol 5:547 9, 1982.
60. Tyson GS Jr, McIntyre RW, Maier GW, Davis JW, Evans RF, Olsen CO, Rankin JS: Ventilatory determinants of cardiopulmonary interactions. Fed Proc 42:97, 1983.
61. Rankin JS, Tyson GS, Olsen CO, Murrah RL, Davis JW: Effects of early extubation on left ventricular function after coronary bypass grafting. Circulation 68 (suppl III):460, 1983.
62. Wolfe JA, Maier GW, Tyson GS, Newton JR, Glower DD, Rankin JS: Determinants of coronary blood flow during external cardiac massage. Circulation 68 (suppl III):941, 1983.
63. Tyson GS, Olsen CO, Spratt JA, Glower DD, Rankin JS: Continuous computer surveillance of cardiac output after coronary artery bypass grafting. Circulation 68 (suppl III):1003, 1983.
64. Glower DD, Hoffmeister M, Newton JR, Wolfe JA, Spratt JA, Tyson GS Jr, Swain JL, Rankin JS: Relationship between altered diastolic properties and systolic function after reversible ischemic injury. Circulation 68 (suppl III):1011, 1983.
65. Glower DD, Tyson GS, Spratt JA, Wolfe JA, Newton JR, Rankin JS: Linearity of the Frank Starling relationship in the intact heart. Circulation 68 (suppl III):1485, 1983.
66. Davis JW, Olsen CO, Tyson GS, Rankin JS: Recent improvements in pulse transit sonomicrometry. IEEE Transactions Biomed Engineering, 30, no 8:534 5, 1983.
67. Rankin JS, Sterba RJ, Karis JH, Oldham HN Jr: Staged correction of pulmonary atresia and absent right pulmonary artery. Arch Surg 118:974 8, 1983.
68. Olsen CO, Tyson GS, Maier GW, Spratt JA, Davis JW, Rankin JS: Dynamic ventricular interaction in the conscious dog. Circ Res 52:85 104, 1983.
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