

BRUCE W. USHER, M. D.
Professor of Medicine
Cardiovascular Division
Medical University of South Carolina
Charleston, South Carolina 29425

Date of Birth: March 11, 1940

<u>EDUCATION</u>	<u>DATES</u>	<u>DEGREES</u>
1. Davidson College	1958-1962	B.S., Chemistry Biology
2. Medical University of South Carolina	1962-1966	M.D.

POSTGRADUATE TRAINING

1. Internship, Rotating Madigan General Hospital Fort Lewis, Washington	7/1/66-6/30/67
2. Internal Medicine Residency Brooke General Hospital Fort Sam Houston, Texas	7/1/67-8/31/69
3. Cardiology Fellowship Brooke General Hospital	9/1/70-8/31/72

MEDICAL LICENSE - BOARD CERTIFICATION

1. South Carolina Medical License
July 15, 1966
2. National Board of Medical Examiners
July 1, 1967
3. American Board of Internal Medicine
June 21, 1972
4. American Board of Internal Medicine - Cardiovascular Diseases
July 27, 1974

ACADEMIC APPOINTMENTS

Assistant Professor of Medicine	9/1/75 - 6/30/79
Associate Professor of Medicine	7/1/79 - 6/30/89
Professor of Medicine	7/1/89 – Present

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Director, Echocardiography Laboratory	9/1/75 - present
Director, Cardiac Catheterization Lab	7/1/79 - 7/1/85
Acting Assistant Director, Division of Cardiology	7/1/79 - 7/1/83
Assistant Director, Cardiovascular Division	7/1/83 - 7/1/85
Director, Clinical Cardiology Fellowship Training	7/1/83 - present
Interim Director, Division of Cardiology	11/1/00 – present

POSITIONS

1972 - 1973	Chief, Cardiology - Fort Gordon Army Hospital, Augusta, Georgia.
1973 - 1975	Private Practice - General Internal Medicine, Bennettsville, S.C.
1975 - present	Cardiology Division, Medical University of South Carolina, Charleston, South Carolina.

PROFESSIONAL ORGANIZATIONS

1. American College of Cardiology, Fellow (Dec.1974)
Governor, S. C. April, 1982 - 1985
2. American College of Cardiology
Member, Governor's Council, 1985 - present
3. American College of Physicians, Fellow (April, 1975)
S.C. Chapter - Treasurer, Governors Council, 1985 - present
4. American College of Physicians, S.C. Chapter
Governor, 1990-1994.
5. American Heart Association, Council on Clinical Cardiology, Fellow (March, 1976)
6. American College of Chest Physicians, Fellow (March, 1982)
7. American Society of Internal Medicine, Member (1973-Present)
8. American Heart Association S.C. Affiliate
Member (1973-Present)
Board of Directors 1978 - present
Vice-President 1984 - 1985
President-Elect 1985 - 1986
President 1986 - 1987
9. South Carolina Medical Association Member (1983-Present)
10. Charleston County Medical Society Member (1975-Present)
11. American Society of Echocardiography Member (1975-Present)
12. South Atlantic Cardiovascular Society Member (1978-Present)
13. Society for Cardiac Angiography and Interventions
Fellow 1992
14. University Medical Associates
Board of Directors Member 1995-1998
15. Association of Professors of Cardiology Feb 1, 2001 - present

COMMITTEES

1. American Heart Association, S.C. Affiliate:
 - a. Continuing Educational Task Force Committee. 1976 - 1978.
 - b. Task Force on the Implementation of Heart Disease and Stroke Education and Prevention Program. Chairman, 1978 - 1985
 - c. Research Advisory Committee. 1981 - 1982.
 - d. Pee Dee Cardiovascular Disease Sub-Committee of the Research Committee, November, 1983 - June, 1984.
 - e. Research Review and Allocations Committee. Vice-Chairman, 1982-1983.
 - f. Research Review and Allocations Committee. Chairman, 1984- 1985.
 - g. Heart and Stroke Risk Factor Conference - Chairman, 1985.
 - h. Executive Committee, 1985 - Present.
 - i. Investment Subcommittee, 1986 - 1987.
 - j. Administrative and Finance Committee, 1986-1987.
 - k. Board of Directors, 1978-Present.
 - l. Chairman, Legislative Affairs Committee, 1987-1988.
 - m. Board of Directors, 1989-1990.
 - n. Government Relations Committee, 1988-1990.

2. American Heart Association National
 - a. Visiting Professor - University of Buenos Aires, Argentina, Oct. 9-22, 1988.
 - b. Guest Speaker - Argentina Society of Cardiology, International Annual Meeting – Cardiology '88 - Buenos Aires, Argentina, Oct. 13-14, 1988.
 - c. American Heart Association National - Council on Scientific Affairs Diagnostic and Therapeutic Technology Assessment Program (DATTA) - March 1990.

3. American College of Physicians, S.C. Chapter - Program Committee - 1977-1978.
American College of Physicians, S.C. Chapter Nominating Committee - 1980, 1990--94.
American College of Physicians, S.C. Chapter Program Committee - 1981.
American College of Physicians, S.C. Chapter Scientific Program Committee Chairman - 1988.
American College of Physicians, S.C. Chapter Member, Governors Council - 1983-present.
American College of Physicians, S.C. Chapter Governor - 1990-1994.

4. South Carolina Medical Association
Medical Services Committee - 1981.

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5. Medical University Hospital
Central Supply Committee 1977 - 1988.
Medical University of South Carolina
Department of Internal Medicine, Student Education and Evaluation Committee.
1977-1981.
Medical University of South Carolina

Faculty Senate 1980-1982, 1985-1986.

COMMITTEES (continued)

1. Chairman, College of Medicine Electoral Unit 1981, 1985 - 1986.
2. Academic Affairs Committee.
3. Executive Committee 1985-1986.
4. Vice-Chairman 1985-1986.
Medical University of South Carolina - College of Medicine Admissions Committee 1979-1982.
5. Medical University of South Carolina - Cardiovascular Research Society Executive Committee. 1981-Present.
Vice-Chairman 1982-1983.
Medical University of South Carolina - Scholarship Committee, College of Medicine. 1985-Present.
6. American Medical Association - Diagnostic and Therapeutic Assessment Committee – 1986 - Present.
7. American College of Cardiology, North and South Carolina State Chapters, Annual Meeting Committee 1999 - Present
8. Medical University Tenure Committee – July 1, 2003 for two year term.

EDITORIAL BOARDS

Echocardiography: A Review of Cardiovascular Ultrasound
1983 - present
Reviewer - American Journal of Cardiology
1984 - present

VISITING PROFESSOR

1. William Beaumont Army Hospital - 1978, El Paso, Texas
2. Eisenhower Army Hospital 1979 - 1986, Augusta, Georgia
3. University of North Carolina - Pharmacology Department - 1985
4. Bowman-Gray School of Medicine - 1981, 1982, 1983, 1984, 1985, 1986.
5. Medical College of Georgia - 1985.
6. University of Rochester School of Medicine - Rochester, N. Y. - 1985.
7. University of Tennessee, Memphis, Tennessee - 1986.

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8. University of Louisville, Louisville, Kentucky - 1986.
9. University of North Dakota School of Medicine - 1986.
10. Loyola University, Hines Illinois - 1987.
11. Walter Reed Army Hospital, Washington, D.C. - 1987.

CONSULTANT

Greenville General Hospital, Internal Medicine Residency Program	1978 - present.
Florence Regional Hospital Family Practice Training Program	1975 - present.
Spartanburg General Hospital Family Practice Training Program	1975 - present.
Marion County Medical Center	
1990 - present	

RESEARCH ADVISORY BOARD

Ciba Corporation	1983 - present
Key Pharmaceutical	1987 – present

INVITED SPEAKER

1. South Carolina Heart Association Annual Scientific Meeting - 1977
 - a) Basics of Echocardiography
 - b) Complex Arrhythmias
2. South Carolina Heart Association Annual Scientific Meeting - 1978
State of the Art - Echocardiography.
3. South Carolina Chapter - Nuclear Medicine Technologist Society - Columbia, S. C. June, 1978
Basics of Echocardiography.
4. William Beaumont Army Hospital - El Paso, Texas - Visiting Professor - 1978
Role of Echocardiography.
5. American Association Cardiovascular Technicians Annual National Meeting - 1979 - Hilton Head, S. C.
Basics of Echocardiography
6. South Carolina Heart Association Annual Scientific Meeting - 1979 Hilton Head, S.C.
 - a) State of the Art - Two-Dimensional Echocardiography.
 - b) Aortic Valve Endocarditis - Three Year Experience at Medical University of South Carolina.
7. South Carolina Medical Association Annual Meeting - Myrtle Beach, S.C. - 1979
Echocardiography in the Adult.

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8. Forsyth County Heart Association Annual Scientific Session - Winston-Salem, N.C. October, 1979.
 - a) Role of Echocardiography in Differential Diagnosis of Cardiomyopathies.
 - b) Afterload Reduction in Congestive Heart Failure.
9. Eisenhower Army Hospital, Fort Gordon, Georgia - Visiting Professor 1979. Echocardiography in Aortic Endocarditis.
10. American College of Physicians, S.C. Regional Meeting, Kiawah Island, S.C. March, 1980. Nuclear Cardiology for the Internist.
11. South Carolina Medical-Association Annual-Scientific Meeting - Myrtle Beach, S.C. - 1980. Two-Dimensional Echocardiography - State of the Art.
12. Advances in Ischemic Heart Disease - American College of Cardiology Continuing Education Program. Kiawah Island, S. C. October, 1980. Role of Echocardiography in Coronary Artery Disease.
13. Care of the Critically Ill or Injured Patient - MUSC Continuing Education Program. Department of Respiratory Care. Charleston, S.C. December, 1980. Cardiovascular Emergencies.
14. Recent Advances in Echocardiography. Bowman-Gray School of Medicine - Ultrasonic School, Winston-Salem, N. C. June, 1981.
 - a) Role of Echocardiography in Aortic Valve Endocarditis.
 - b) Role of Echocardiography in Prosthetic Valve.
15. Newer Trends in Diagnosis and Management of Cardiovascular Disorders - American College of Cardiology Continuing Education Program, Charleston, S.C. September, 1981. New Trends in Echocardiography
16. Bowman-Gray School of Medicine - Ultrasonic School - Visiting Professor Winston-Salem, N. C. November, 1981.
 - a) Role of Echocardiography in Mitral Stenosis
 - b) Role of Echocardiography in Coronary Artery Disease
 - c) Role of Echocardiography in Following Patients with Prosthetic Valve.
 - d) Role of Echocardiography in Endocarditis
17. Care of the Critically Ill or Injured Patient - MUSC Continuing Education Program. Department of Respiratory Care. Charleston, S. C. Dec. 4, 1981. Management of Arrhythmias In Acute Myocardial Infarction.
18. Witwatersrand University Medical School, Johannesburg, South Africa. April 3, 1982
 - a) Noninvasive Studies in Valvular Heart Disease
 - b) Porcine Valve - Role of Echocardiography - in Evaluation of Dysfunction.
19. Wentworth Hospital, Durban, South Africa. April 8, 1982. Bacterial Endocarditis - Role of Echocardiography.
20. Recent Advances in Echocardiography - Bowman-Gray School of Medicine, Winston-Salem, N. C. Program Chairman, November, 1982.
 - a) Role of Echocardiography in Endocarditis.
 - b) Prosthetic Valve Dysfunction - Role of Echocardiography.
21. Care of the Critically Ill or Injured Patient - MUSC Continuing Education Program. Department of Respiratory Care. Charleston, S. C. Dec. 4, 1982. Management of Congestive Heart Failure.
22. First Annual Convention, The S. C. Society of Diagnostic Ultrasound May 22, 1983.

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- Introduction to Two-Dimensional Echocardiography - Normal Views.
23. National Society for Cardiopulmonary Technology, May 26, 1983.
Left Ventricular Function Correlating Cath, Echo. MUGA.
 24. Update in Cardiology - Doppler Echocardiography in Adult Cardiology
American College of Cardiology Continuing Education Program 1982 Charleston, SC
 25. Memorial Hospital, University of North Carolina, Chapel Hill, N.C. Clinical Pharmacology Seminar
Current Role of Transcutaneous Nitrates in Clinical Cardiology, 1983.
 26. Mecklenburg County Heart Association, Charlotte, North Carolina
Medical Management of Angina Pectoris, 1983
 27. Bowman Gray School of Medicine - Ultrasonic School - Visiting Professor Winston-Salem, N. C., November, 1983.
 - a) Doppler Echocardiography
 - b) Role of Echocardiography in Endocarditis
 - c) Role of Echocardiography in Evaluation of Prosthetic Valves
 - d) Contrast Echocardiography
 28. The Family Practice Residency Program - Greenville, S.C.- Visiting Professor November 22, 1983.
Medical Management of Angina Pectoris.
 29. Care of the Critically Ill or Injured - MUSC Continuing Education Program Department of Respiratory Care. Charleston, S.C. December 4, 1983.
 - a) Recognition and Management of Myocardial Heart Failure.
 - b) Recognition and Management of Congestive Heart Failure Secondary to Valvular Heart Disease.
 30. American College of Cardiology Continuing Education Program
Clinical Cardiology - Charleston, S. C. 1984
 - a) Update Echocardiography
 - b) Update Thrombolytic Therapy and PTCA in Coronary Artery Disease
 31. Bowman Gray School of Medicine Ultrasonic School - Visiting Professor November, 1984.
 32. Care of the Critically Ill or Injured. MUSC Continuing Education Program Department, Respiratory Care, Charleston, SC. December, 1984
 - a) Cardiogenic Shock
 - b) Aortic Dissection
 33. American College of Cardiology Continuing Education Program
Update Clinical Cardiology - Charleston, S. C. 1985
 - a) Overview of Doppler Echocardiography
 - b) Overview of Percutaneous Transluminal Coronary Angioplasty
 34. Memorial Hospital Greenville, S. C. - Heart Day -
 - a) Overview of Echocardiography
 - b) Role of Doppler Echocardiography February, 1985
 35. American Heart Association, S.C. Affiliate 1985 Scientific Session
Role of Echocardiography in Hypertensive Heart Disease. April, 1985

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36. National Society of Cardiovascular Technologists, National Meeting
Doppler Echocardiography in Evaluation of Prosthetic Valves.
May, 1985
37. Southeastern Chapter Society of Nuclear Medicine, Hollywood, Florida, Annual Meeting
Non Isotopic Cardiovascular Diagnostic Imaging
October 26, 1985.
38. Bowman-Gray School of Medicine Ultrasonic School - 1985
 - a) Echocardiography in Evaluation of Mitral Valve Disease
 - b) Echocardiography in Evaluation of Aortic Valve Disease
 - c) Echocardiography in Evaluation of Intracardiac Masses
 - d) Echocardiography in Evaluation of Prosthetic Valves
 - e) Echocardiography in Evaluation of Pericardial Effusion
39. Recent Advances in Echo Doppler - 1984 - Wild Dunes Beach and Racquet Club
Charleston, S. C.
Echo Doppler in Evaluation of St.Jude Prosthetic Valve
40. 2nd Annual Echo Doppler Seminar - 1985 - Wild Dunes Beach and Racquet Club
Charleston, S. C.
Does Echo Doppler Provide Information Not Obtained by History and Physical Exam?
41. 3rd Annual Echo Doppler Seminar - 1986 - Innisbrook, Florida
Echo Doppler in Evaluation of Diastolic Function of Left Ventricle Comparison of
Doppler Gradient of the Aortic Valve With Micromanometer Determined Gradients
42. Charles H. Still Annual Family Practice Review - Jefferson City, Missouri 1985
Medical Management of Angina Pectoris
43. Charles H. Still Annual Family Practice Review - Jefferson City, Missouri 1986
Current Concepts of Silent Ischemia
44. Ohio Academy of Family Practice Annual Meeting - 1986
Current Concepts of Silent Ischemia
45. Tenth Annual Cardiology Update - Spoleto - Charleston, S. C. - 1986
American College of Cardiology Continuing Education Program
Update on Echo Doppler
46. Recent Advances in Cardiology - South Padre Island, Texas - 1986
Silent Ischemia
47. Fourth Annual Echo Doppler Seminar - 1987 - Innisbrook Florida -
Echo Doppler Evaluation of Prosthetic Valves.
48. Eleventh Annual Cardiology Update - Spoleto - Charleston, S.C. -
1987 - American College of Cardiology Continuing Education Program
Echo Doppler Update 1987.
49. Fifth Annual Echo Doppler Seminar 1988 - Charleston, S.C.
Echo Doppler Detection of Prosthetic Valve Dysfunction.
50. Twelfth Annual Cardiology Update - Spoleto - Charleston SC 1988
American College of Cardiology Continuing Education Program
Echo Doppler Evaluation of Valvular Heart Disease

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51. Argentina Society of Cardiology, International Annual Meeting, Cardiology 88 - Buenos Aires, Argentina Oct. 13, 14 1988.
 - a) Doppler Echocardiography: Evaluation of aortic stenosis.
 - b) Doppler Echocardiography: Evaluation of the Patient with complication of myocardial infarction.
 - c) Echo Doppler Assessment of Valvular Prosthesis.
52. Cordoba, Argentina - Oct. 1988 Platelet aggregation in Mitral Valve Prolapse.
53. University of Buenos Aires, Division of Cardiology, Argentina.
 - a) Oct. 17 - Does Echo Doppler Provide information notobtained by history and physical exam?
 - b) Oct. 18 - Doppler Echo in Evaluation of Prosthetic Valves.
 - c) Oct. 19 - Doppler Echocardiography in Diagnosis of Aortic Dissection.
 - d) Oct. 20 - Doppler Echocardiography in Evaluation of Left Ventricular Systolic Function.
 - e) Oct. 21 - Doppler Echocardiography in Infective Endocarditis.
54. Louisiana Cardiovascular Institute Clinical Symposium - Baton Rouge, La. Oct. 29, 1988. Diagnostic Dilemmas of Acute Intervention and TPA in Acute Myocardial Infarction
55. Symposium Myrtle Beach, S.C. Nov. 1988. Current Management of Myocardial Infarction in the 80's
56. National Meeting of Physicians Assistants, Fayetteville N.C. April 1988. Medical Management of Angina Pectoris
57. Loyola University, Hines, Illinois. Grand Rounds, February 1988. Controversies Use of Nitroglycerin in Ischemic Heart Disease.
58. Walter Reed Army Hospital, Washington D.C. Cardiology Division, Dec. 1987. Silent Ischemia

PAPERS PRESENTED

1. Electrical Alternans - Mechanism in Pericardial Effusion - B. W. Usher, Richard Popp - Annual Meeting of Association of Army Cardiologists, William Beaumont Hospital. El Paso, Texas May, 1971.
2. Myocardial Infarction in a 13 Year Old Male - Single Coronary Artery. B. W. Usher. George McGranahan, Annual Meeting of Association of Army Cardiologists, Madigan General Hospital, Tacoma, Washington. May, 1972.
3. Atrial Septal Defect Masquerading As Congestive Cardiomyopathy - Bruce Dunn B. W. Usher - Annual Meeting of Association of Army Cardiologists, Madigan General Hospital, Tacoma, Washington. May, 1972.
4. Echocardiographic Detection of Supraaortic Stenosis - B. W. Usher, D. Goulden, J. P. Murgo, Annual Meeting of Association of Army Cardiologists, Brooke General Hospital, San Antonio, Texas. April, 1973.
5. Echo-phonocardiography in Primary Aortic Valvular Bacterial Endocarditis - M. E. Harper, B. W. Usher, American College of Physicians, S. C. Regional Meeting, Myrtle Beach, S. C. March, 1977.

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6. Clinical and Echocardiographic Differentiation of Murmurs Secondary to Left Ventricular Outflow Obstruction. J.E. Gaddy, Jr., B.W. Usher, American College of Physicians, S.C. Regional Meeting, Kiawah Is., SC March, 1978.
7. 99m Technetium Pyrophosphate Myocardial Scans in Patients with Coronary Artery Disease and Segmental Contraction Abnormalities of the Left Ventricle. L.E. Kibler, B.W. Usher, American College of Physicians, S.C. Regional Meeting, Kiawah Island, S.C. March, 1978.
8. The Continuing Saga of James Brown - Traumatic Disruption of the Heart, Subsequent Aortic Outflow Mass. B. W. Usher, R. Sade, South Atlantic Cardiovascular Society Hilton Head Island, S.C. August, 1978 (Winner of Case of The Year Award).
9. Aortic and Mitral Valve Endocarditis - 3 Year Review MUSC, M.E. Assey, B.W. Usher, American College of Physicians, S.C. Regional Meeting, Kiawah Island, S. C. March, 1979.
10. Indications For Permanent Pacemaker - 3 Year Review at MUSC. William S. Stavrou, B. W. Usher, American College of Physicians, S. C. Regional Meeting, Kiawah Island, S. C. March, 1979.
11. Clonidine Hydrochloride Induced Heart Block - Report of 4 Cases With Emphasis on Mechanism - L. Freeman, B. W. Usher, American College of Physicians, S. C. Regional Meeting, Kiawah Island, S. C. March, 1979.
12. Intravenous Propranolol: Correlation of Plasma Levels and Initial Effects On Ventricular Function. T. Fagin, W. Grossman, B.W. Usher, W. Newman. 80th Annual Meeting, American Society for Clinical Pharmacology and Therapeutics. Kansas City, Kansas. March, 1979.
13. Atrial Septal Defect In Patients Over Age 50. M. Grayson, B. W. Usher. American College of Physicians, S. C. Regional Meeting, Kiawah Island, S. C. March, 1980.
14. Coronary Artery Bypass Surgery - Factors Affecting Return to Work - Analysis of 100 Consecutive Patients. C. W. Hendricks, B. W. Usher, American College of Physicians, S. C. Regional Meeting, Kiawah Island, S. C. March, 1980.
15. Coronary Artery Bypass Surgery In Patients With Diabetes Mellitus. William M. Hudson, B. W. Usher. American College of Physicians, S. C. Regional Meeting Kiawah Island, S. C. March, 1981.
16. Mitral Valve Prolapse Presenting As Severe Mitral Insufficiency. Michael E. Assey, Peter C. Gazes, and B. W. Usher. American College of Physicians, S. C. Regional Meeting, Kiawah Island, S. C. March, 1981.
17. Current Results of Heart Valve Replacement. Fred A. Crawford, John M. Kratz, Bruce W. Usher, Michael E. Assey, Peter C. Gazes, Robert M. Sade. American College of Physicians, S. C. Regional Meeting, Kiawah Island, S. C. March, 1982.
18. Porcine Valve Dysfunction: Role of Two-Dimensional Echocardiography. B.W. Usher, Robert M. Sade, Ashby Taylor, American College of Physicians, Regional Meeting, Kiawah Island, S.C. March, 1982.
19. Mitral Valve Endocarditis: Experience At Medical University of South Carolina. Alan Gertler, B. W. Usher, American College of Physicians, S. C. Regional Meeting, Kiawah Island, S. C. March, 1982.
20. Coronary Artery Recanalization by Intracoronary Streptokinase in Acute Myocardial Infarction Followed by Early Coronary Artery Bypass Grafting. M.E. Assey, R.B.

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- Leman, B.W. Usher, F. Crawford and H.I. Pass. Presented at American College of Physicians S. C. Regional Meeting, Kiawah Island, S. C. March, 1983.
21. Echocardiographic Detection of a Left Ventricular Thrombus Formation in Acute Myocardial Infarction. Have We Opened Pandora's Box? Bruce W. Usher, M. D. Presented at American College of Physicians S.C. Regional Meeting, Kiawah Island, S. C. March 12, 1983.
 22. Valve Replacement in Chronic Aortic Insufficiency With Abnormal Left Ventricular Function. Gregory W. San, M. D.; Bruce W. Usher, M. D. and Michael E. Assey, M. D. Presented at American College of Physicians S. C. Regional Meeting, Kiawah Island, S. C. March 13, 1983.
 23. Doppler Echocardiography in Evaluation of Aortic Outflow Murmurs. W. Ennis James, M. D. and Bruce W. Usher, M. D., FACP Presented at American College of Physicians, S. C. Chapter Scientific Meeting March 16, 1984.
 24. Thrombolytic Therapy for Right Atrial Thrombosis. T. Pritchard. M. D. M. Pate, M. D., Bruce W. Usher, M. D., FACP Presented at American College of Physicians, S. C. Chapter Scientific Meeting, March, 1985
 25. Non Isotopic Cardiovascular Diagnostic Imaging - Bruce W. Usher, M. D. Society of Nuclear Medicine, Southeastern Chapter Annual Meeting Hollywood, Florida 1985
 26. Aortic Stenosis in the Elderly - Experience at MUSC with Balloon Valvuloplasty and Surgery - Bruce W. Usher, M.D. , Fred Crawford, M.D. Presented at American College of Physicians, S.C. Update Scientific Meeting 1986.
 27. Percutaneous Transluminal Coronary Angioplasty of Diseased Saphenous Vein Grafts Treatment of Choice? Gregory Miller, M.D., Bruce W. Usher, M.D. Presented at American College of Physicians, S.C. Chapter Scientific Meeting 1987.
 28. Changes in Contractility by Calcium Channel Blockers: A Load Assessment. BW Usher, M.D., Gerald Dorn, M.D., Adell Bell, J.F. Spann, Jr., Blase Carabello. Presented at Sixtieth Annual Scientific Session of American Heart Association. Anaheim, California. Oct. 1987.
 29. Comparison of Conventional Doppler with Doppler Color Flow Imaging in Patient with Regurgital Ventricular Septum secondary to Aortic Myocardial Infarction. Trask, Joseph M.D., Usher, B.W. Presented American College of Physicians SC Chapter, Scientific Session, Oct. 7, 1988.
 30. Result of Streptokinase for Acute Myocardial Infarction in 100 consecutive in a Community Hospital. Trask, J. M.D., Trask, N. M.D., Cushing, W. M.D., Butler E, M.D., Usher, B.W. M.D. Presented at American College of Physicians S.C. Chapter Annual Scientific Session, Oct.7, 1988.
 31. Non-Isotopic Cardiovascular Diagnostic Imaging 1988- Southeastern Society of Nuclear Medicine, Nov. 1988. Bruce W. Usher, M.D.
 32. Pulmonic Valve Endocarditis. The Medical University of South Carolina Experience. Karavan M, M.D., Usher, B.W. M.D. Presented at American College of Physicians S.C. Chapter Annual Scientific Session Oct. 7, 1988.

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33. Cardiovascular Status of Panic Disorder Patients with and without Prominent Cardiac Symptoms. Jolley R, M.D., Lydiard, RB, Ph.D., M.D. Assey, ME, M.D., Usher BW, M.D., Barnwell, WH M.D., Ballenger JC, M.D. Medical University of S.C. Presented at the Annual Meeting of the American Psychiatric Association (NR7) NY NY May 1990. In print: Psychosomatics Journal 1991.
34. Vasoseal Use in Patients Undergoing Percutaneous Coronary Intervention. Usher BW, Hood DE, Duncan RL, McLaurin BT:Transcatheter Cardiovascular Therapeutics - Washington, D.C.October 8, 1998.

RESEARCH PROJECTS

1. 99m Technetium Pyrophosphate Myocardial Scan in Patients With Coronary Artery Disease, Previous Anterior or Anterior Septal Wall Myocardial Infarction and Segmental Contraction Abnormalities of the Left Ventricle - Etiology and Significance. Principal Investigator: Bruce W. Usher, M. D. Co-Principal Investigator: Larry E. Kibler, M. D. Funding: State Biomedical Research Funding, 1978 - 1979.
2. Afterload Reduction in Mitral Insufficiency - Effect on Exercise Tolerance. Funding: State Biomedical Research Funding, 1980 - 1981.
3. Platelet Aggregation in Mitral Valve Prolapse Syndrome. Principal Investigator: Bruce W. Usher, M. D. Funding: State Biomedical Research Funding, 1978 - 1979. South Carolina Heart Association, 1980 - 1981.
4. Shearing - Effects of Nitroprusside and Trimethaphan - Evaluation of dp/dt Utilizing Echocardiography and Micromanometer Catheters. Unfunded.
5. Pulmonic Valve A Wave - Mechanism and Meaning - A Combined Echocardiographic and Micromanometer Study. Completed
6. Obstruction to Left Ventricular Outflow by Porcine Valves in the Mitral Position - Relationship to Left Ventricular Size. Completed
7. Detection of Aortic Annular Abscesses by Two-Dimensional Echocardiography. Completed.
8. Determination of Pulmonary Capillary Pressure by Echocardiography. Completed.
9. Comparison of Valium and midazolam as a Premedication for Cardiac Catheterization. Funded - Roche Laboratories. Completed.

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10. Comparison of the Efficacy and Safety of Ethmozine versus Long-Acting Quinidine in Patients Who Are Post-Myocardial Infarction and Who Have Ventricular Ectopy. Funded - E. I. duPont de Nemours Company.
11. Accuracy of Doppler Estimation of Gradients Across Prosthetic Valves. Correlation with Intraoperative Gradient and Cardiac Catheterization Micromanometer Gradient. On-going
12. Correlation of dp/dt (Micromanometer) With Aortic Acceleration Indices by Doppler. On-going
13. Effect of Calcium Channel Blocker on Ventricular Systolic and Diastolic Function Echo Doppler Study Funded - Peter C. Gazes Research Society.
14. Incidence of Silent Ischemia in First 24 hours Post PTCA - On-going
15. Dobutamine Stress Testing in Detection of Coronary Artery Disease Comparison of Thallium Imaging with 2-D Echocardiography Funded - American Heart Association, S. C. Affiliate
16. Doppler Echocardiography in Aortic Mitral Regurgitation - to Evaluate Systolic Function in Animal Study in conjunction with Blase Carabello, M.D. and Michael Zile, M.D. Ongoing.
17. Doppler Echocardiography of Diastolic Function in the Elderly, Charleston Heart Study in conjunction with Peter C. Gazes, M.D. and Julian Keil, Dr.PH. Completed.
18. Rapport: ReoPro in Acute Myocardial Infarction and Primary PTCA Organization and Randomized Trial # patients = 4. Study Duration 1996-1997. Principal Investigator: Bruce W. Usher, M.D. Ph. III
19. A Randomized Double Blind Evaluation of Efficacy and Safety of Two Dosing Regimens of Integrelin vs. Placebo for Reducing Mortality and Myocardial (Re)Infarction in Patients with Unstable Angina or Non Q Wave MI. # patients = 37. PURSUIT: Study Duration 1996-1997. Principal Investigator: Bruce W. Usher, M.D. Ph. III.
20. Multicenter, Open Label, Active-Controlled Randomized Study of Expanded Utilization of Intravenous Beta Blocker Therapy in Acute Ischemic Syndromes: Intravenous Esmolol Myocardial Ischemia Trial (EMIT) # patients = 0, awaiting IRB approval. Study Duration: 1997-1999. Principal Investigator: Bruce W. Usher, M.D. Ph. III

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CONTINUING EDUCATION PROGRAMS - CO-DIRECTOR

1. Three Days of Cardiology - Kiawah Island, S. C. October, 1977
American Heart Association sponsored
2. Valvular Heart Disease - Kiawah Island, S. C., October, 1978
American College of Cardiology sponsored
3. New Concepts in Management of Congestive Heart Failure, October, 1979
Kiawah Island, S. C.
American College of Cardiology sponsored.
4. Advances In Ischemic Heart Disease, October, 1980
Kiawah Island, S. C.
American College of Cardiology sponsored
5. Clinical Cardiology - Newer Trends in Diagnosis and Management September, 1981
Charleston, S. C.
American College of Cardiology sponsored
6. Clinical Cardiology - Update in Diagnostic and Therapeutic
October, 1982
Techniques. American College of Cardiology sponsored
Charleston, S. C.
7. Recent Advances in Echocardiography, November, 1982
Program Chairman, Bowman Gray School of Medicine
Winston-Salem, N. C.
8. Medical Management of Angina in the '80s. Director of Meeting. Feb. 24, 1983
Presentation: Stepwise Development of an Appropriate Treatment
Program. Division of Continuing Education, MUSC - Atlanta, Ga.
9. Clinical Cardiology - 1983 Charleston, S.C., October, 1983
10. Update Cardiology For The Primary Physician, Charleston, S.C. June 7-9, 1984
11. Doppler Echocardiography Seminar Isle of Palms, S.C. 9/6-8/84 (Chairman)
12. Ninth Annual Update Cardiology for the Primary Physician - Charleston, S. C., May,
1985.
13. Practical Doppler Echocardiography - Isle of Palms, S. C. Chairman, September, 1985
14. 3rd Annual Echo Doppler Seminar - Innisbrook, Florida- Sept.1986 Co-Chairman

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15. Tenth Annual Update Cardiology for the Primary Physician, Charleston, S.C., June 1986.
16. Eleventh Annual Update Cardiology for the Primary Physician, Charleston, S.C., June 1987.
17. Twelfth Annual Update Cardiology for the Primary Physician, Charleston, S.C., June 1988.
18. Fourth Annual Echo Doppler Seminar, Innisbrook, Florida, Co-Chairman, Sept. 1987.
19. Fifth Annual Echo Doppler Seminar, Charleston, S.C., Co-Chairman, Sept. 1988.
20. Annual Update in Cardiology for the Primary Care Physician, Charleston SC May 31 - June 3, 2000
21. ACC Conference: Congenital Heart Disease in the Adult Patient. Stevenson, WA May 20 -24, 2000
22. Update in Cardiology for the Primary Care Physician, ACC Charleston, SC May 31- June 3, 2001
23. Update in Cardiology for the Primary Care Physician, ACC Charleston, SC June 1 – 4, 2002.

SCIENTIFIC EXHIBITS

1. Southern Medical Association - Las Vegas, 1979. Role of Echocardiography In Aortic Endocarditis. (Awarded First Place for Scientific Exhibit).
2. American College of Physicians Annual Session - New Orleans, Louisiana, 1980. Role of Echocardiography in Aortic Endocarditis.
3. American College of Chest Physicians - Dallas, Texas, 1984
Doppler Echocardiography in Aortic Stenosis and Mitral Stenosis.
4. 3rd Annual Echo Doppler Seminar, Innisbrook, Florida, 1986
Doppler Echocardiography in Valvular Heart Disease
5. Fifty-Third Annual Society of Nuclear Medicine Scientific Assembly, Los Angeles, California, 1988. The Detection of Coronary Artery Disease with Dobutamine Thallium Stress Testing.
6. American Heart Association National Sessions, Atlanta, Ga. Nov 1993.
Poster Presentation: Echocardiography: Distributions and

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Correlates of Left Ventricular Mass in an Elderly Biracial Cohort. Susan E. Sutherland, Peter C. Gazes, Julian E. Keil, Bruce W. Usher, Blase A. Carabello. Circulation 1993; 88 (Suppl I): I-358

- 7 Poster Presentation: Treatment of Coronary Artery Disease in Hemodialysis Patients - PTCA v. stenting Malanuk R, Nielsen C. Thiers, P, Assey, ME, Usher BW, Leman RB. Presented at Society of Angiography and Interventions 23rd Annual Scientific Sessions May 3 - 6, 2000, Charleston SC

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2. Usher, BW: Tuberos Sclerosis, Progress Notes, Brooke General Hospital XII, October 11, 1968.
3. Usher, BW: Central Nervous System Sarcoid. Progress Notes, Brooke General Hospital XIII, January 17, 1969.
4. Usher, BW: Antiarrhythmia Drugs, Part I, Quinidine. Progress Notes, Brooke General Hospital XV, July 30, 1971.
5. Usher, BW: Antiarrhythmia Drugs, Part II, Procainamide. Progress Notes, Brooke General Hospital XV, August 6, 1971.
6. Usher, BW: Antiarrhythmia Drugs, Part III, Lidocaine. Progress Notes, Brooke General Hospital XV, August 13, 1971.
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11. Usher, BW; Lizarralde, G: Guest Editors Symposium - Perspectives In Cardiology. Journal of South Carolina Medical Association 75:September, 1979.

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13. Usher, BW; Hendrix, G: Severe Acute Aortic Regurgitation: Early Recognition and Management of Life-Threatening Syndrome. *J. Cardiovascular Medicine* 5:169-181, 1980.
14. Sade, R; Usher, BW: Vasodilator Therapy in Congestive Heart Failure. Letters to Editor, *Circulation* 62:1143-1144, 1980.
15. Assey, ME; Usher, BW: Echocardiography in Diagnosing and Managing Aortic Valve Endocarditis. *Southern Medical Journal* 74:558-565, 1981.
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ABSTRACTS

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BOOK REVIEWS

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HONORS AND AWARDS

1. Nominated by junior and senior medical students, for the Golden Apple Award. American Medical Students Association, MUSC Chapter, March, 1992.
2. Nominated by South Carolina Chapter, Alpha Omega Alpha, to honorary faculty membership in National Honor Medical Society. February, 1997.
3. Laureate Award American College of Physicians South Carolina Chapter, Charleston SC, September 22,2000.