Curriculum Vitae David C. Booth, M.D. Endowed Professor of Medicine University of Kentucky Medical Center

Practicing Hospitals:
University of Kentucky Chandler Medical Center 800 Rose Street
Lexington, KY 40536
and
The Lexington Veterans Affairs Medical Center
Lexington, KY 40511
and
Samaritan UK Medical Center
Lexington, KY 40506
and
Rockcastle County Hospital
Mount Vernon, KY 40456

I. Address, Personal, and Certification

Home Address, Telephone: 1859 Bellefonte Dr

Lexington, KY 40503

606-268-2052

Office Address, Telephone: Division of Cardiology

326 Wethington Building Lexington, KY 40536-0200

606-323-5630

Birth Date: December 9, 1948

Birth Place: Dallas, Texas

Spouse: Louise Hughes

Children: Jeffrey, 4/5/76

James, 2/2/78 Mark, 3/24/86

Current Position:

Director Pulmonary Hypertension Services, the Gill Heart Institute Chief Cardiology Section, Lexington VAMC

| Certification (Diplomate) | Date | Number |
|--|---------|---------|
| Texas State Board of Medical Examiners | 8/17/74 | E-2474 |
| National Board of Medical Examiners | 7/1/75 | 1 58633 |
| American Board of Internal Medicine | 6/22/77 | 060818 |
| ABIM, Cardiovascular Diseases | 11/5/81 | 060818 |
| ABIM, Interventional Cardiology | 11/2002 | 060818 |

| State Licensure | License # |
|-----------------|-----------|
| Texas | E2474 |
| North Carolina | 23472 |
| Kentucky | 21749 |

II. Education

| Year | Degree | Institution |
|------|--------------------|-------------------------------------|
| 1967 | High SchoolRobe | ert E. Lee High School, Houston, TX |
| 1971 | B.A. History | Tulane University, New Orleans, LA |
| 1974 | M.D. University of | of Texas at Houston |

III. Professional Experience

1974-75; Internship, Internal Medicine; University of Texas at Houston

1975-77; Residency, Internal Medicine; University of Texas at Houston

1977-79; Cardiology Fellowship; Georgetown University, Washington, D.C.

1979-81; Research Fellow and Instructor in Cardiology; University of North Carolina at Chapel Hill

1981-present; Division of Cardiology; UK Medical Center and Lexington VAMC

IV. Academic Appointments

| Year | Position | | |
|---|--|--|--|
| 1979-81 | Instructor in Cardiology University of North Carolina School of Medicine Chapel Hill, North Carolina | | |
| 1981 | Assistant Professor of Medicine University of Kentucky College of Medicine Lexington, Kentucky | | |
| 1982-1997 | Director, Cardiac Catheterization Laboratories University of Kentucky and Lexington VAMC | | |
| 1984-present | Chief, Cardiology Section, Lexington VAMC | | |
| 1987 | Associate Professor of Medicine with Tenure University of Kentucky College of Medicine | | |
| 4/1/92-7/1/96 | Acting Chief, Division of Cardiology University of Kentucky | | |
| 1993 | Professor of Medicine with Tenure | | |
| 10/98-3/31/99 | Interim Chief, Division of Cardiology University of Kentucky | | |
| 4/1/99-3/1/03 | Associate Chief, Division of Cardiology University of Kentucky | | |
| 3/1/03-1/1/04 | Acting Chief of Cardiology University of Kentucky | | |
| 7/1/03-7/05 | Director Cardiac Catheterization Laboratories UKMC | | |
| 7/08-present | Director, Pulmonary Hypertension Services, UKMC | | |
| V. Hospital Appointments | | | |
| 1979-81 Medical Center of the University of North Carolina, Chapel Hill | | | |

1981-pres UK Medical Center, Lexington, KY and the Lexington VAMC

1983-2011 Active Staff, Saint Joseph Hospital East, Lexington, KY

1991-1999 Frankfort Regional Medical Center, Frankfort, KY

2008-present Active Staff, Samaritan UK Medical Center

VI. Consulting

Imaging Consultant to the General Electric Company Medical Systems Group 1985-1995

VII. Teaching Activity

1981-present, instruction of residents and medical students on Cardiology Inpatient Service, 1-2 mos./year

1982-present, Cardiac Catheterization Laboratory Training for Cardiology Fellows

1982, '83, and '84, Preceptor for the Physical Diagnosis Course

1982-1995, Coordinator of the Cardiac Exam portion of the 2nd Year Physical Diagnosis Course

1988, '89, and '90, Conjoint Lecturer

1989-93, panelist for Cardiology presentation for the 2nd Year Pathology Course

1993 Problem Based Learning Tutor for Combined Medicine-Surgery Course

1992-present Coordinator 4th Year Elective in Cardiology

VIII. Advising Activity

1985-present, Medical Resident Advisor

1987-88, Ph. D. advisory committee for Mark Cunningham, Ph. D. (principal proponent Mark Gillespie, Ph. D.)

IX. Administrative Activity (also see above)

Co-Director, Quality Assurance Program for the Division of Cardiology, 1987-1996

Interim Director, Coronary Care Unit, UK Medical Center, 1992-1996

Institutional Committees

Chair, Code 500 Committee, A.B. Chandler Medical Center, 1981-1996 Member, Promotions and Progress Committee, UK College of Medicine, 1987-1991

Member, Committee on Tenure and Promotion, UK College of Medicine, 1990-3

Member, Short-Term Education Committee, Department of Medicine, 1990-1998

Department of Medicine Intern Selection Committee, 1991-Chair, Smoke-Free Committee, Lexington VAMC, 1984-1995 UK Medical Center ICU Committee, 1992-96 Lexington VA Medical Center ICU Committee 2001-pres

X. Professional Activity

Societies

Member of the American Heart Association Fellow of the American College of Cardiology Fellow American Heart Association, the Council on Clinical Cardiology Member, Pulmonary Hypertension Association

Regional Committees

Member, Research Review Committee, AHA KY Affiliate, 1989-98 Member, AHA Ohio Southeast Consortium Peer Review Committee 1B, 1998-2003

Chair, AHA Ohio Southeast Peer Review Committee 1B 2002 and 2003

National Committees

Planning Committee for Department of Veterans Affairs Cooperative Study of Angioplasty Compared to Medicine (ACME), 1986-present

Member, Merck Fellowship Awards Committee, American College of Cardiology, 1988-1994

Member, PTCA Database Subcommittee, American College of Cardiology, 1989-1991

Member, Joint ACC/AHA Committee on Guidelines and Indications for Coronary Artery Bypass Surgery, 1989-1991 Member, Board of Governors, AHA Council on Clinical Cardiology, 1997-2001

Member, Executive Committee, Department of Veterans Affairs Cooperative Study, "COURAGE," Clinical Outcomes Utilizing Revascularization And Aggressive Drug Evaluation, study 1999 to present

Member NIH Study Section for Small Business Research Activities ZRG1 CVS-K (10) (B) 2004-present

Chair, NIH Study Section for Small Business Research Activities ZRG1 CVS-K (10) (B) Fall 2007

Invited Reviewer, NIH CICS Study Section, 2008-present

Extramural Activities

Editorial Board, the Journal of the American of College of Cardiology, 1994-2000

Reviewer for the Journal of the American College of Cardiology

Reviewer for Circulation

Reviewer for the American Heart Journal

Reviewer for Catheterization and Cardiovascular Diagnosis

Invited Reviewer for the Department of Veterans Affairs Cooperative

Studies Evaluating Committee

Reviewer for Chest

Reviewer for Clinical Nephrology

XI. Speaking Engagements

Local:

October 1983, Medical Grand Rounds: "Percutaneous Transluminal Coronary Angioplasty"

October 1985, Medical Grand Rounds: "Coronary Artery Bypass Surgery: The Results of the Randomized Trials"

July 1985, Medical Residents Conference: "Management of Acute Myocardial Infarction"

July 1986, Medical Residents Conference: "Management of Acute Myocardial Infarction"

July 1987, Medical Residents Conference: "Management of Acute Myocardial Infarction"

July 1988, Medical Residents Conference: "Management of Acute Myocardial Infarction"

February 1988, Medical Grand Rounds: "Aortic Dissection."

July 1989, Medical Residents Conference: "Management of Acute Myocardial Infarction"

February 1990, Medical Residents Conference: "Hypertrophic Obstructive Cardiomyopathy"

July 1990, Medical Residents Conference: "Management of Acute Myocardial Infarction"

October 1989, Cardiology Grand Rounds: "Quality of Life after Coronary Artery Bypass Surgery for Unstable Angina"

April 1990, Cardiology Grand Rounds: "Does Thrombolytic Therapy Reduce Infarct Size?"

October 1990, Medical Grand Rounds: "Indications for Thrombolytic Therapy in the Treatment of Acute Myocardial Infarction." October 1990.

July 1991, Medical Residents Conference: "Management of Acute Myocardial Infarction"

July 1992, Medical Residents Conference: "Management of Acute Myocardial Infarction"

August 1992, Cardiology Grand Rounds: "Current Status of Thrombolytic Therapy in the Management of Acute Myocardial Infarction"

August 1992, Cardiology Grand Rounds: "A Primer on Coronary Arteriography and Selected Aspects of Cardiac Catheterization"

July 1993, Medical Residents Conference: "Management of Acute Myocardial Infarction"

August 1993, Cardiology Grand Rounds: "A Primer on Coronary Arteriography and Selected Aspects of Cardiac Catheterization"

October 1993, Cardiology Grand Rounds: "The Assessment of Contractile State"

November 1993, Department of Internal Medicine Research Conference: "Selected Findings from the Department of Veterans Affairs Cooperative Study of Angioplasty Compared to Medicine"

November 1993, Medical Resident Conference, "Cardiac Auscultation"

July 1994, Medical Resident Conference, "Management of Acute Myocardial Infarction"

August 1994, Medical Resident Conference, "Hypertrophic Cardiomyopathy"

September 1994, Emergency Medicine Grand Rounds, "Management of Acute Myocardial Infarction"

September 1994, Medical Grand Rounds, "Evolving Strategies in Primary and Secondary Prevention"

October 1994, Neurology Grand Rounds, "Thrombolytic Therapy and Catheter Intervention in Stroke"

November 1994, Medical Grand Rounds, "Abdominal Aortic Aneurysm"

October 1995, Medical Grand Rounds, "Cardiac Rehabilitation"

April 1998, Pediatric Grand Rounds, "Hyperhomocysteinemia"

October 1998, Healthy Human Course, "Primary and Secondary Prevention of Coronary Heart Disease"

October 1999, Healthy Human Course, "Primary and Secondary Prevention of Coronary Heart Disease"

May 2000, "Congestive Heart Failure," case presentation and lecture, First-Year Medical Students, "Health and Disease Course

May 2001, "Congestive Heart Failure," case presentation and lecture, First-Year Medical Students, "Health and Disease Course

March 5, 2003 Medical Grand Rounds, "Hypertrophic Cardiomyopathy"

August 22, 2003 Medical Grand Rounds, "Metabolic Syndrome X: Biochemistry and its Impact on Ischemic Heart Disease"

February 2004, "Congestive Heart Failure for Paramedic," Introduction Course to the UK Aeromedical Program

October 2004: "Hypertrophic Obstructive Cardiomyopathy," Cardiology Fellow Core Curriculum Lecture

July 2005: "Introduction to Cardiac Catheterization," Cardiology Fellow Core Curriculum Lecture

January 2005: "Pulmonary Hypertension," Cardiology Fellow Core Curriculum Lecture

April 2005: "Intraaortic Balloon Counterpulsation," Cardiology Fellow Core Curriculum Lecture

August 2005: "Introduction to Cardiac Catheterization," Cardiology Fellows Core Curriculum Lecture

November 2005: "Pulmonary Hypertension," Cardiology Fellow Core Curriculum Lecture

August 2006, Cardiology Fellow Core Curriculum Lecture, "Cardiac Hemodynamics"

January 2006, Cardiology Fellow Core Curriculum Lecture, "Pulmonary Arterial Hypertension"

August 2007, Cardiology Fellow Core Curriculum Lecture, "Cardiac Hemodynamics"

November 2007, Cardiology Fellow Core Curriculum Lecture, "Pulmonary Arterial Hypertension"

November 2008, Cardiology Fellow Core Curriculum Lecture, "Pulmonary Arterial Hypertension"

January 2009, Cardiology Grand Rounds, "Update on Pulmonary Arterial Hypertension"

February 2009, Cardiology Grand Rounds, "Hypertrophic Obstructive Cardiomyopathy"

November 2009, Cardiology Fellow Core Curriculum Lecture, "Pulmonary Arterial Hypertension"

March 2010, Cardiology Fellow Core Curriculum, "Constrictive Pericarditis"

September 2010, Cardiology Fellow Core Curriculum, "Pulmonary Arterial Hypertension"

Regional:

December 1, 1981, "Cardiomyopathy," Methodist Hospital, Pikeville, KY, UK Continuing Medical Education

April 17, 1982, "Coronary Spasm: Common Problem or Medical Curiosity," given as part of a UK Cardiology Symposium "Advances in Clinical Cardiology," Lexington, KY

April 17, 1982, panel discussion: "Relationship of Medical and Surgical Therapy in Patients with Coronary Artery Disease," given as part of a UK Cardiology Symposium "Advances in Clinical Cardiology," Lexington, KY

October 15, 1982, "Current Management of Congestive Heart Failure with Case Presentations," given as part of UK-sponsored meeting "New and Changing Concerns of Internal Medicine," Lexington, KY

October 14, 1983, "Percutaneous Transluminal Coronary Angioplasty: Its Role in the Management of Chronic Coronary Disease," given at UK Cardiology symposium "Advances in Cardiovascular Medicine," Lexington, KY

October 5, 1984, "Catheterization and Treatment of Coronary Artery Disease: Angioplasty and Intracoronary and Intravenous Thrombolysis," given at UK Cardiology symposium "Advances in Cardiovascular Medicine," Lexington, KY

May 1984: "Indications and Use of Thrombolytic Therapy," UK Continuing Medical Education, Saint Claire Medical Center, Morehead, KY

February 11, 1985, "Use of Streptokinase in the Management of Acute MI," King's Daughters Memorial Hospital, Frankfort, KY

April 23, 1988, "The Role of Angiography and Angioplasty in Acute Myocardial Infarction," given as part of a UK Cardiology symposium "Therapeutic Advances in Acute Myocardial Infarction," Lexington, KY

October 26, 1989: "Indications for Cardiac Catheterization, Coronary Angioplasty, and Bypass Surgery," UKCME, Prestonsburg Highlands Regional Medical Center.

December 8, 1989: "Unstable Angina: Evolving Definition and Management," given as part of a UK Cardiology symposium "Diagnostic and Therapeutic Advances in Cardiovascular Disease," Lexington, KY

March 15, 1990: "Indications for Cardiac Catheterization and Coronary Angioplasty," UKCME, Prestonsburg Highlands Regional Medical Center, given at Pikeville, KY.

January 28, 1991, "Fibrinolytic Therapy." West Virginia State Medical Association Mid-Winter Clinical Conference, Charleston, West Virginia.

August 1991, UK Continuing Medical Education: "Current Status of Thrombolytic Therapy for Acute Myocardial Infarction," Jenny Wiley State Park, Floyd County, KY

September 14, 1991, UK Continuing Medical Education: "Current Status of Thrombolytic Therapy for Acute Myocardial Infarction," Shaker Village at Pleasant Hill, KY

February 1993, UK Physician Assistant Continuing Medical Education Program, "Evaluation and Management of Ischemic Heart Disease."

1993, UK Continuing Medical Education: "Update on Congestive Heart Failure: Newer Strategies for an Old Problem," in conjunction with UK School of Pharmacy

September 1998, UK Continuing Education: "Emerging Therapies in Hypertrophic Obstructive Cardiomyopathy," as part of "Treatment Attacks on Coronary Valley 1"

- 1999: UK Cardiology Grand Rounds: "Coronary Flow Reserve"

 UKCME: "Treatment Attacks on Coronary Valley 2" Meeting: "The
 Homocysteine Hypothesis"
- 2000: UK Department of Internal Medicine Grand Rounds, "Emerging Trends in the Treatment of Unstable Angina and Revascularization Strategies" UKCME "Treatment Attacks on Coronary Valley 3": "Hope for ACE Inhibitors but No Glory for Antioxidant Vitamins"
- May 2000 "Ischemia Testing: Which Test to Order," Kentucky Coalition of Nurse Practitioners and Midwifery," Gault House, Louisville, KY
- March 2003 "Metabolic Syndrome X," Louisville, KY, sponsored by Takeda Pharmaceutical Company
- January 2004 "Adventures, and Ways to Avoid Misadventures, in High-Risk Coronary Interventional Procedures," Medical and Surgical

Approach to Cardiovascular Disease, Radisson Plaza Hotel,

UKCME

February 2004 "Metabolic Syndrome X," Cincinnati, Ohio, sponsored by

Takeda Pharmaceutical Company

Industry:

March 1986, Milwaukee, WI: General Electric Medical Systems Group, "Current Status of Digital Cardiac Imaging"

June 1989, Milwaukee, WI: General Electric Medical Systems Group, "Use of the General Electric *DX Cardiac* Digital Cardiac Imaging System"

June 1990, Lexington, KY: General Electric Medical Systems Cardiac Sales Group, "An Overview of the Practice of Invasive Cardiology"

June 1990, Lexington, KY: General Electric Medical Systems Cardiac Sales Group, "Current Status of Digital Cardiac Imaging,"

October 15, 1991, Las Vegas, Nevada: General Electric Cardiac Users Group, "Everyday Use of Cardiac Digital Imaging Systems"

UK Family Medicine Review:

1982, Lexington, KY: "What is the Place of Digitalis Now?"

1983, Lexington, KY: "The Swan-Ganz Catheter: Usage and Interpretation"

1985, Lexington, KY: "Significance of Percutaneous Transluminal

Coronary Angioplasty"

1986, Lexington, KY: "Emerging Indications for Coronary Artery Bypass Surgery"

1987, Lexington, KY: Thrombolysis and/or PTCA in Acute Myocardial Infarction"

1988, Lexington, KY: "Coronary Artery Spasm"

1989: "Regression of Atherosclerosis: Can it Occur in Man?"

1990: "Recent Developments in Thrombolytic Therapy for Acute Myocardial Infarction"

1993: "Update on Thrombolytic Therapy for Acute Myocardial Infarction"

1994: "Evolving Strategies for Primary and Secondary Prevention"

1995: "Guidelines for Management of Unstable Angina Pectoris"

1996: "Prevention of Cardiovascular Disease in Women"

2001-2002: "Unstable Angina: AHCPR 94 to the ACC/AHA 2000 – Update and Beyond"

2003: Two subjects, "Unstable Angina: the AHCPR 94 to the ACC/AHA

2000 – Update and Beyond," and "Management of ST Segment Elevation Myocardial Infarction"

2004: "Update on Acute Ischemic Disease Management"

National/International:

March 11, 1985, panel speaker on "The Athlete Heart Syndrome," Scientific Sessions of the American College of Cardiology, Anaheim, California.

November 1985, "Digital Cardiac Imaging." Panel member "Digital Cardiac Imaging Symposium," sponsored by the University of Kentucky Division of Cardiology, Washington, D.C.

October 1986, "Effect of Nicotine and of Cigarette Smoking on Human Coronary Blood Flow." Presented at Berzelius Symposium IX, Smoking and Cardiovascular Disease Epidemiology and Mechanisms in Goteburg, Sweden, at invitation of Swedish Society of Medicine.

November 1986, "Coronary Artery Spasm, Clinical Spectrum, Pathophysiologic Insight." Paul Turner Memorial Lecture at Annual Meeting of Southern Medical Association. Atlanta, Georgia.

November 14, 1987, "Power of Digital Imaging vs. Additional Cost and Complexity," Panel Member, Second "Digital Cardiac Imaging Symposium", sponsored by the University of Kentucky Division of Cardiology, Anaheim, California.

March 1989, "Percutaneous Transluminal Coronary Angioplasty of Coronary Bypass Grafts." Scientific Sessions of the American College of Cardiology, Anaheim, California.

November 11, 1990, "Evaluation of Coronary Lesions by Quantitative Angiography, given as part of UK-sponsored "New Frontiers in Cardiac Imaging," Dallas, Texas.

February 18-22, 1991, Egyptian Society of Cardiology, 18th Annual Meeting, Cairo, "Angiography Reading Session" - Feb. 19

August 1994, UKCME-sponsored lecture series on cruise to Alaska, "Update in Cardiovascular Medicine."

February 1, 2001, "Current Status of Antiplatelet and Antithrombotic Therapy in Percutaneous Coronary Interventions," First Course of Advances in Cardiology, IBERO American University, San Jose, Costa Rica

February 1, 2001, "Metabolic Syndrome: Emerging Basic Science Insights and Relation to the Prevention of Coronary Heart Disease Events," First Course of Advances in Cardiology, IBERO American University, San Jose, Costa Rica

November 27, 2001, "Mechanisms of Restenosis," XIX Columbian Congress of Cardiology, Cartagena, Columbia

November 27, 2001, "Update on Intravascular Ultrasound, Flow-Pressure Means of Assessing the Hemodynamic Significance of a Coronary Stenosis, and Intravascular Angioscopy," XIX Columbian Congress of Cardiology, Cartagena, Columbia

November 28, 2001, "Management ST Segment Elevation Myocardial Infarction," XIX Columbian Congress of Cardiology, Cartagena, Columbia

November 29, 2001, "Metabolic Syndrome: Emerging Basic Science Insights and Relation to the Prevention of Coronary Heart Disease Events," XIX Columbian Congress of Cardiology, Cartagena, Columbia

July 10, 2012 Update on Pulmonary Hypertension, Holy Cross Hospital, Silver Spring, Maryland

XII. Research/Creative Productivity

Grants and Contracts Funded:

[&]quot;PTCA vs. Medical Treatment for Single Vessel Disease" - Feb. 20

[&]quot;New Strategies for Thrombolytic Therapy" - Feb. 21

[&]quot;Present Status and Future of Interventional Catheters" - Feb. 22

[&]quot;PTCA in Acute Myocardial Infarction" - Feb. 22

University of North Carolina School Faculty Grants Committee, "Ventricular Premature Beats: Does Multiformity Mean Multifocality?" 1980, \$2000.00

University of North Carolina Faculty Grants Committee, "Changes in Coronary Venous Potassium in Response to Myocardial Ischemia" 1980 \$2000.00

University of Kentucky Tobacco and Health Research Institute, "Effects of Cigarette Smoking on Regional Coronary Hemodynamics and Metabolism," 1982-83, \$43,289.00

University of Kentucky Faculty Research Committee, "Effects of Calcium Channel Blocking Agents on Left Ventricular Relaxation and Distensibility," 1982-83, \$2000.00

University of Kentucky Tobacco and Health Research Institute, "Effects of Cigarette Smoking on Regional Coronary Blood Flow and Metabolism," renewal, 1983-84, \$22,715.00

American Heart Association Kentucky Affiliate, "Coronary Vasospasm in Atherosclerotic Rabbits," 1985-86, \$17,000.00

AHA Kentucky Affiliate, "Neutrophil-Dependent Coronary Spasm," 1986-87, \$15,000.00

VA Cooperative Studies Program, "Angioplasty Compared to Medicine," Site PI, 1987-1993, \$160,000

AHA Kentucky Affiliate, Mast Cells in Experimental Coronary Spasm," 1987-88, \$15,506.00

AHA Kentucky Affiliate, "Exacerbation of Coronary Spasm by Hypercholesterolemia," 1988-89, \$16,000.00

AHA Kentucky Affiliate, "Coronary Artery Dynamics in Patients with the Syndrome of Chest Pain and Normal Coronary Arteriography," 1990-91, \$14,688.00

AWESOME: Angina with Extreme Surgical Operative Mortality Evaluation; VA Cooperative Study of unstable angina in patients at high operative risk, 1995-2000

COURAGE: Clinical Outcomes Utilizing Revascularization And Aggressive Drug Evaluation; randomized VA Coop-NIH-Canadian f/u study to ACME to evaluate impact of PTCA on CAD endpoints, beginning Summer 1999, Site PI and Member COURAGE Steering Committee, through August 2006.

Industry-Sponsored Trials:

Pfizer Pharmaceuticals, "Hemodynamic Effects of Nifedipine Following Intravenous or Intracoronary Administration," 1984-85, \$45,000.00

MARCATOR: "Multicenter American Research Trial with Cilazapril after Angioplasty to Prevent Transluminal Coronary Obstruction and Restenosis." principal investigator, 1990-91, \$205,055, Hoffman LaRoche, Inc.

MARCATOR: "Multicenter American Research Trial with Cilazapril after Angioplasty to Prevent Transluminal Coronary Obstruction and Restenosis - the Extended F/U Study." principal-investigator, 1991, \$40,544, Hoffman LaRoche, Inc.

GUSTO: "Global Utilization of Streptokinase and tPA or Occluded Coronary Arteries." Co-investigator, 1991, \$9000.

PREVENT: "Prospective Randomized Evaluation of the Vascular Effects of Norvasc Trial," Site PI, \$850,000, 1992-1996

STRIDE-I, II, and III: Randomized trial of sitaxsentan in the treatment of pulmonary hypertension, Encysive Pharmaceuticals, 2004-2007

ARIES-I: Randomized trial of ambrisentan in the treatment of pulmonary hypertension, Gilead Sciences, 2005-2006

COMPASS-II Trial: Randomized trial of bosentan plus placebo compared to bosentan plus sildenafil, Actelion, Inc, 2005-present

Other Grants Written:

1984: University of Kentucky Tobacco and Health Research Institute, "Effects of Cigarette on Lipid Metabolism and the Genesis and Progression of Atherosclerosis: A Rat Model," \$83,723, approved but not funded.

1992: Request for Planning Approval, "Angioplasty Compared to Medicine in the Treatment of Multivessel Coronary Artery Disease: ACME-II," to the Veterans Administration Cooperative Studies Program, approved but not funded.

Publications:

- (1) Original Articles
- 1. Booth DC, Popio KA, Gettes LS: Multiformity of induced unifocal ventricular premature beats in human subjects: electrocardiographic and angiographic correlations. Am J Cardiol 1982; 49:1643-1653.
- 2. Nissen S, Booth D, Waters J, Fassas T, DeMaria A: Evaluation of left ventricular contractile pattern by intravenous digital subtraction ventriculography: comparison with cineangiography and assessment of inter-observer variability. Am J Cardiol 1983; 52: 1293-1298.
- 3. Smith M., Dawson P, Elion J, Booth D, Kwan OL, Earle G, DeMaria A: Correlation of continuous wave doppler velocities with cardiac catheterization gradients in canine aortic stenosis. J Am Coll Cardiol 1985; 6: 1306-1314.
- 4. Booth D, Nissen S, DeMaria, A: Assessment of the Severity of Valvular Regurgitation by Digital Subtraction Angiography Compared to Cineangiography. Am Heart J1985; 110: 406-409.
- 5. Booth DC: What is the Place of Digitalis Now? The Swan-Ganz Catheter. F.R. Lemon, M.D., ed. Family Medicine Review, Science-Thru-Media, Inc., 1985.
- 6. Booth DC: The Swan-Ganz Catheter: Use and Interpretation, F.R. Lemon, M.D., ed. Family Medicine Review, Science-Thru-Media, Inc., 1985.
- 7. Clifton GD, Batenhorst RL, Hendrickson NM, Booth DC, Ryberg ML: Evaluation of 516 cardiopulmonary resuscitation attempts. Am J Hosp Pharm1985; 42: 2478-2483.
- 8. Wisenbaugh TW, Booth DC, DeMaria AN, Nissen S, Waters JS: Relationship of contractile state to ejection performance in patients with chronic aortic valve disease. Circulation1986; 73:47-53.

- 9. Nissen SE, Elion JL, Booth DC, Evans J, DeMaria AN: Value and limitations of computer of digital subtraction angiography in the assessment of coronary flow reserve. Circulation 1986; 73: 562-571.
- 10. Booth DC, Nissen SE, DeMaria AN: The Promise of Digital Cardiac Angiography. Editorial Comment on article by Ikeda, et al. "Quantitative Evaluation of Regional Myocardial Blood Flow by Videodensitometric Analysis of Digital Subtraction Coronary Arteriography in Man. J Am Coll Cardiol 1986; 8: 817-818.
- 11. Nissen S, Waters J, Booth D, Baugh M, DeMaria A: Determination of the left ventricular ejection fraction by computer densitometric analysis of digital subtraction analysis: experimental validation and correlation with area length methods. Am J Cardiol 1987; 59: 675-680.
- 12. Booth DC, Cunningham MR, Rountree RM, Elion JS, Nissen S, and Gillespie MN. Coronary Arteriography in the Intact Rabbit. Demonstration of Coronary Vasomotor and Electrocardiographic Effects of Ergonovine and Indomethacin in Rabbits After Abrupt Cessation of Prolonged Nitroglycerin Treatment. Am Heart J 1987; 114: 343-348.
- 13. Grayburn PA, Smith MD, Gurley JC, Booth DC, and DeMaria AN. Effect of Aortic Regurgitation on the Assessment of Mitral Valve Orifice Area by Doppler Pressure Half-Time in Mitral Stenosis. Am J Cardiol 1987; 60: 322-326.
- 14. Gillespie MN, Booth DC, Friedman BJ, Cunningham MR, Jay M, and Demaria AN. fMLP provokes coronary vasoconstriction and myocardial ischemia in rabbits. Am J Physiol 1988; 254, H481-H486.
- 15. Booth DC. Aortic Stenosis and the Potential Role of Balloon Aortic Valvuloplasty. Masters in Cardiology 1988; 5: 11-13.
- 16. Booth DC, Wisenbaugh T, et al.: Left ventricular distensibility and passive elastic stiffness in atrial septal defect. J Am Coll Cardiol 1988;12: 1231-6.
- 17. Gurley JC, Nissen SE, Booth DC, Harrison M, Grayburn P, Elion JL, DeMaria AN: Comparison of simultaneously performed digital and film-based cineangiography. Circulation 1988; 78: 1411-1420.

- 18. Grines CL, Nissen SE, Booth DC, Branco MC, Gurley JC, Bennett KA, DeMaria AN, et al.: A new thrombolytic regimen for acute myocardial infarction using combination half-dose tissue-type plasminogen activator with full-dose streptokinase: a pilot study. J Am Coll Cardiol 1989; 14: 573-580.
- 19. Nissen SN, Grines CL, Gurley JC, Sublett K, Haynie D, Diaz C, Booth DC, DeMaria AN: Application of a new ultrasound imaging catheter in the assessment of vascular dimensions. Circulation 1990; 81: 660-666.
- 20. Clifton GD, Booth DC, Hobbs S, Boucher BA, Foster TS, McAllister RG, DeMaria AN: Negative inotropic effect of intravenous nifedipine in coronary artery disease: relation to plasma levels. Am Ht J 1990;119: 283-290.
- 19. Gurley JC, Booth DC, Hixon C, Smith MD: Removal of retained intracoronary percutaneous transluminal coronary angioplasty equipment by a percutaneous twin guidewire method. Cath and Cardiovasc Diag 1990; 19: 251-256.
- 20. Gurley JC, Nissen SN, Elion JL, Booth DC: Determination of coronary flow reserve by digital angiography: validation of a practical method not requiring power injection or electrocardiographic gating. J Am Coll Cardiol 1990; 16: 190-197.
- 21. Garrahy PJ, Kwan OL, Booth DC, DeMaria AN: Assessment of abnormal systolic intraventricular flow patterns by doppler imaging in patients with left ventricular dyssynergy. Circulation 1990; 82: 95-104.
- 22. Booth DC, Deupree RH, Hultgren HN, DeMaria AN, Scott SM, Luchi RJ, and the investigators of the cooperative study #28: Quality of Life after bypass surgery for unstable angina: 5-year follow-up results of a VA cooperative study. Circulation1991; 83: 87-95.
- 23. Kirklin JW (Chair), Akins CW, Blackstone EH, Booth DC, Califf RM, Cohen LS, Hall RJ, Harrell FE, Kouchoukas NT, MaCallister BD, Naftel DC, Sheldon WC, Smith HC, Wechsler AS, Williams JF, American College of Cardiology/American Heart Association Task Force on Assessment of Diagnostic and Therapeutic Cardiovascular Procedures Subcommittee on Coronary Artery Bypass Surgery: Guidelines and indications for the coronary artery bypass operation. J Am Coll Cardiol 1991; 17: 543-89 and Circulation 1991; 83: 1125-1173.

- 24. Grines CL, Nissen SE, Booth DC, Gurley JC, Chelliah N, Wolf R, Blankenship J, Branco MC, Bennett K, DeMaria AN, and the KAMIT Group: A prospective, randomized trial comparing combination half-dose tissue-type plasminogen activator and streptokinase with full-dose tissue-type plasminogen activator. Circulation 1991; 84:540-549.
- 25. Nissen SE, Gurley JC, Grines CL, Booth DC, McClure R, Berk M, Fischer C, DeMaria AN: Intravascular ultrasound assessment of lumen size and wall morphology in normal subjects and patients with coronary artery disease. Circulation 1991; 84: 1087-1099.
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