

MIKEL DWAIN SMITH, M.D.

Professor of Medicine

Director, Adult Echocardiography Laboratory
University of Kentucky Medical Center

PERSONAL DATA

Address: (Office) Division of Cardiology
University of Kentucky Medical Center
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Birth Place: Eugene, Oregon

Citizenship: United States

EDUCATION

<u>Year</u>	<u>Degree</u>	<u>Institution</u>
1970	High School	Paducah Tilghman High School Paducah, Kentucky
1973	Bachelor of Science (Biology) Summa cum laude	Murray State University Murray, Kentucky

POST GRADUATE TRAINING

<u>Year</u>	<u>Degree</u>	<u>Institution</u>
1977	M.D.	University of Kentucky College of Medicine Lexington, Kentucky
1977-1978	Internship in Medicine	Medical College of Virginia Richmond, Virginia
1978-1980	Resident in Medicine	Medical College of Virginia Richmond, Virginia
1980-1982	Fellow in Cardiology	Medical College of Virginia Richmond, Virginia

ACADEMIC APPOINTMENTS

<u>Year</u>	<u>Position</u>	<u>Institution</u>
1982-1983	Instructor in Medicine/Cardiology	University of Kentucky College of Medicine Lexington, Kentucky
1983-1987	Assistant Professor of Medicine/Cardiology	University of Kentucky College of Medicine Lexington, Kentucky
1987-1992	Associate Professor of Medicine/Cardiology (with tenure-1987)	University of Kentucky College of Medicine Lexington, Kentucky
1987-1997	Director, Cardiovascular Fellowship Training Program	University of Kentucky College of Medicine Lexington, Kentucky
1989-present	Director, Adult Echocardiography Laboratory	University of Kentucky College of Medicine Lexington, Kentucky
1992-present	Professor of Internal Medicine/ Cardiology	University of Kentucky College of Medicine Lexington, Kentucky
1997-present	Associate Chairman for Academic Affairs Department of Internal Medicine	University of Kentucky College of Medicine Lexington, Kentucky
2001-present	Medical Director Cardiovascular Sonographer Training Program	St. Catharine College Bardstown, Kentucky

OTHER EMPLOYMENT PERTAINING TO CURRENT PROFESSIONAL APPOINTMENTS

<u>Year</u>	<u>Position</u>	<u>Institution</u>
1987-1991	Echo Consultant	Molecular Biosystems, Inc. San Diego, California
1987-1989	Echo Consultant	Berlex Laboratories (Schering)

Berlin, West Germany

1988-1992 Echo Consultant Kings Daughters Memorial Hospital
Frankfort, Kentucky

1990-1994 Cardiovascular Kings Daughters Memorial Hospital
Consultant/Staff Frankfort, Kentucky
Physician

HONORS

1969 National Merit Scholar Finalist

1969-1970 Who's Who Among American High School Students

1970 American Society of Chemical Engineers Award, Paducah
Tilghman High School, Paducah, Kentucky

1971 Outstanding Freshman Biology Student, Murray State University

1971-1973 Beta Beta Beta, National Biology Honor Society
President, MSU Chapter 1972-73

1972-1973 Alpha Chi Honor Society

1973 Bausch and Lomb Science Award:
Outstanding Senior Biology Student, Murray State University

1973 Summa Cum Laude, Murray State University:
Cumulative GPA 4.0/4.0

1973 Who's Who in American Colleges and Universities

1973-1977 Robert Wood Johnson Scholarship Award,
University of Kentucky College of Medicine

1995 Chairman's Award for Excellence in Teaching
Department of Internal Medicine
University of Kentucky College of Medicine

1996 American College of Physicians - Kentucky Chapter
Outstanding Teacher Award
University of Kentucky College of Medicine

1997 Who's Who in Medicine and Healthcare

First Edition, 1997-98

CERTIFICATION AND LICENSURE

a) Board Certification:

	<u>Date</u>	<u>Number</u>
Diplomate, National Board of Medical Examiners	7/1/78	188055
Diplomate, American Board of Internal Medicine	9/9/80	075853
Subspecialty Certification: Cardiovascular Disease	11/20/85	075853
American Society of Echocardiography - Examination of Special Competency in Echo	6/6/96	183
American College of Cardiology and Institute for Clinical Evaluation of ECG EXAM: Proficiency in Interpretation of Electrocardiograms	9/15/99	000122
Advanced Cardiac Life Support (ACLS) Provider	6/17/00	H5899
Certified in Basics of Radioisotope Handling (Nuclear Medicine)	2/18/01	
Board Certified in Nuclear Cardiology	10/30/01	2211

b) Licensure:

<u>State</u>	<u>Date</u>	<u>Perm/Temp</u>	<u>Number</u>
Virginia	1977-1982	Temporary	0101-03671
Kentucky	1982	Permanent	22018
Drug Enforcement Administration (DEA)			1982-present

PROFESSIONAL AFFILIATIONS

American College of Physicians, 1980-1982

Fellow, American College of Cardiology, 1987-present

American Society of Echocardiography, 1985-present
Board of Directors, 1994-1997

Fellow, American Heart Association, Council on Clinical Cardiology, 1992-present

Member, Laennec Society, American Heart Association, 1993-present

COMMITTEES

Medical Grand Rounds Planning Committee, University of Kentucky Medical Center, 1983-1987

Medical Records Utilization and Review Committee, 1985-1988

Graduate Medical Education Committee, 1987-1989

Ad Hoc Committee on Medicine Residency, 1988-1990

Internal Medicine Chairman's Advisory Committee, 1988-1992

Internal Medicine Residency Education Committee, 1991-1992

Cardiology Chief Search Committee, University of Kentucky, 1992-1996; 1998-2000

American Heart Association, Committee on Echocardiography, 1992-1994

University of Kentucky College of Medicine Committee on Faculty Appointments, Appeals, Promotions and Tenure, 1993-1996

American Society of Echocardiography, WebSite Committee, 1997-1999

American Society of Echocardiography, Committee on Training & Credentialing, 1993-2000

Department of Internal Medicine, Ad Hoc Committee on Resident and Fellow Training Programs, 1995-1997

Associate Chairman for Academic Affairs, Internal Medicine, University of Kentucky, 1997-present

Chairman, Appointments, Promotion, and Appeals Committee
Department of Internal Medicine, 1997-present

University of Kentucky College of Medicine Committee on Conscious Sedation, 1999-present

Master Thesis Committee (1998-99) for Tina Julian, M.S. Wenner-Gren (NASA) Research Labs, Lexington, KY. "Volume Changes of Heart Chambers During 6° Head-Down Tilt Measured by ECG-Gated MRI".

Ophthalmology Chair Search Committee, University of Kentucky, July 2002

Preventive Medicine Chair Search Committee, University of Kentucky, August 2002

Cardiology Steering Committee, 2003 – present

Internal Medicine Resident Evaluation Committee, 2003 - present

SERVICE TO EDITORIAL BOARDS

Journal of the American Society of Echocardiography, 1987-present

Editorial board, 1991-1997

Ad Hoc Reviewer for:

American Heart Journal

Journal of the American College of Cardiology

Journal of the American Society of Echocardiography

GRANTS/FUNDING

University of Kentucky PSP Grant-1984-1985 (\$8,600). Correlation of Doppler Ultrasound Velocities with Cardiac Catheterization Gradients in Canine Aortic Stenosis. Principal Investigator.

American Critical Care-1985-1986 (\$40,000). Effect of Esmolol on Left Ventricular Function in Patients with Coronary Artery Disease. Principal Investigator.

American Heart Association, Kentucky Affiliate-1986-1987 (\$22,000). Infarct Imaging Using Computer-Enhanced 2D-Echocardiography. Co-Investigator with Jonathan Elion, M.D.

American Heart Association, Fellowship Award 1984-1985. Quantitation of Aortic Stenosis by Doppler Ultrasound. Faculty Sponsor for Marcelo Branco, M.D.

Tobacco and Health Research Institute-1986-1987 (\$24,000). Characterization of Human Natural Killer (NK) Cells Within Various Pulmonary Compartments and Evaluation of Changes in NK Activity in Smokers With and Without Chronic Obstructive Pulmonary Disease. Co-Investigator with Ernest Marshall, M.D.

National Institutes of Health-1984-1985 (Approved but not funded). Evaluation of Prosthetic Heart Valves by Doppler Ultrasound. Co-Investigator with Anthony N. DeMaria.

National Institutes of Health-1985-1986 (Approved but not funded). Role of Platelet Aggregates in Intracardiac Thrombosis. Co-Investigator with Cheryl Mahony, M.D.

American Heart Association, Kentucky Affiliate. Fellowship Award-1987-1988 (\$20,000). Assessment of Left Ventricular Diastolic Function by Exercise Doppler. Principal Investigator and Sponsor (Niksa Drinkovic).

Short Term Educational Leave-March 24-25, 1988 (Funding of Expenses to Attend Course "2D Trans-Esophageal and Epicardial Echocardiography" in Atlanta, GA).

Corometrics (\$3,000) Educational Grant to National Learning Center (Heart House) to Sponsor Course, December 6-8, 1989.

Molecular Biosystems, Inc. (Mallinkrodt)-1988-1989 (\$38,000). Efficacy and Safety of Intravenous Alburnex Injections for Enhancing Image Contrast in Echocardiography. Principal Investigator in Multicenter Trial.

Berlex Labs (Schering)-1989-1990 (\$15,000). Evaluation of LV Function in Dogs Using SHU-508, a New Transpulmonary Echo Contrast Agent. Co-Investigator with Anthony N. DeMaria.

Molecular Biosystems, Inc. (Mallinkrodt)-1989-1990 (\$50,000). Efficacy of High-Dose Intravenous Alburnex^R in Technically Difficult Echoes. Principal Investigator in Multicenter Trial.

Acuson (\$5,000) Educational Grant to cover production costs of Book Chapter: Evaluation of Valvular Regurgitation by Doppler; 1991 Cardiology Clinics.

Sepracor, Inc.-1991-1992 (\$100,000). Single Oral Dose Pharmacokinetic and Pharmacodynamic Comparison of S-Atenolol and Racemic Atenolol (Tenormin) in Healthy Adults. Co-Principal Investigator with G. Dennis Clifton, Pharm.D.

American Lung Association, Kentucky Affiliate-1991-ongoing (\$15,000). The Role of Atrial Natriuretic Peptide in Cor Pulmonale. Co-Principal Investigator with J.W. McConnell.

Medtronic (\$1,500) Educational Grant for National Learning Center (Heart House) Course, December 14-16, 1992.

Burroughs Wellcome Co.-1992-1993 (\$235,000). Acute Dose Tolerance and Pharmacokinetics of Oral 104U85HCl in Healthy Male Volunteers. Co-Principal Investigator with Drs. Dennis Clifton, Daniel Wermeling (College of Pharmacy).

Berlex Laboratories-1994-95 (\$32,000). Safety and Efficacy of Levovist for Enhancing Echo/Doppler Images in Humans. Principal Investigator for UK Site in Multicenter Trial.

DuPont Pharma (\$4,000) Educational Grant for National Learning Center (Heart House) Course. January 10-12, 1994.

Bracco s.p.a.-1994-95 (\$50,000). Efficacy of Contrast Echo in Enhancing LV Endocardial Borders During Stress Echo: Alburnex vs. BR-1. Principal Investigator for UK site of Multicenter Trial. (1996-97)

Genesa - 1996-97 (\$30,000). Safety and Efficacy of Arbutamine as a New Agent for Pharmacologic Stress Echo. Principal Investigator for UK in Multicenter Trial.

Redux Study 1997-1998 (\$30,000): Effects of Fenfluramine/Phentermine on the Heart. Echo Core Lab for Local Study. Co-Principal Investigator with Dr. James Anderson.

Mallinkrodt (\$2,000) Educational Grant to Sponsor fellow to attend 1998 American Society of Echocardiography National Meetings in San Francisco, CA. June 11-14, 1998.

Kentucky Evaluation of Diet Drug Effects on Heart Valves (Class-Action Settlement with American Home Products). UK: Regional Core Echo Lab. April-July 2000.

TEACHING CONFERENCES

Awards:

Awarded Best Teaching Division (Cardiology) by Third Year Class (1984)-March 1983

Awarded Best Medicine Grand Rounds of Year-1987-1988 ("Mitral Stenosis")

Special Appreciation Award (given by Internal Medicine Residents) for Educational Contributions to Morning Report-June 15, 1991

Contributor of Echocardiographic Cases to 1993 ABIM: Cardiovascular Board Examination

Nominated by Medical School Class of 1996: Excellence in Teaching Award

Chairman's Award for Excellence in Teaching: Department of Internal Medicine, 1995.

Awarded 3 Master Teacher Awards in Teaching, Innovation, and Leadership, College of Medicine, Office of Academic Affairs, University of Kentucky, October 1998.

Lectures/Conferences:

Coordinator, Cardiology Graphics Conference (weekly)-1984-present
Division of Cardiology, University of Kentucky

Coordinator and Presenter (monthly)-Cardiovascular Journal Club (Monthly)-January, 1992-1996

Medicine 831: Coordinator and Presenter (Cardiac Pathology) 2nd year Medical Students: 1988-2000 (4 hours)

Medicine 811-Physical Diagnosis 2nd year Medical Students Lecturer: 1983-1995 (4 hours, case presentations)

Medicine 811-Physical Diagnosis 2nd year Medical Students Clinical Tutor: 1983, 1984, 1986, 1988

Noon Conference:

Medicine Housestaff Conferences (Noon Conference):

September 1982	May 25, 1988	October 4, 1996
September 1984	October 25, 1988	June 12, 2001
March 1985	January 19, 1989	March 25, 2002
April 1985	May 26, 1989	August 16, 2002
(Yearly) – August 1985-1995	June 8, 1989	October 25, 2002
April 10, 1986	January 15, 1990	December 13, 2002
October 8, 1986	September 25, 1990	February 20, 2003
October 29, 1986	August 21, 1991	April 24, 2003
January 27, 1987	August 27, 1991	May 15, 2003
April 12, 1988	March 6, 1992	
April 15, 1988	May 7, 1992	
April 19, 1988	April 7, 1994	

Cardiology Graphics Conferences 1983-Present, Bi-Monthly (list available).

Internal Medicine Residency ECG Conference (six per year) 2002-present.

"Medical Approach to Angina Pectoris"

Presented at Regional ACP Meetings-October 1982. Hyatt Regency Hotel, Lexington, Kentucky

"Compressive Cardiac Disorders: Evaluation and Management"

Medicine Grand Rounds, University of Kentucky-January 1985

"Utility and Current Applications of Transesophageal Imaging"

Cardiology Grand Rounds-April 17, 1990

"Transesophageal Echo: University of Kentucky Experience 1987-Present"

Medicine Grand Rounds-April 25, 1990

"Doppler Quantitation of Valvular Regurgitation"

Cardiology Grand Rounds-April 9, 1991

"Medical Games (Cardiology): A New Approach to Learning for Housestaff:

November 9, 1990; February 8, 15, 22, 1991; March 1, 1991; May 17, 31, 1991; and August 28, 1991

“Performing and Interpreting Stress Tests”
Housestaff Workshop (3 hours each) – 1999, 2000

Invited Lectures

"Use of Contrast Echo in Diagnosis in Shunts, Regurgitation, and Myocardial Perfusion"
CME Course-Advances in Cardiovascular Medicine
Hyatt Regency, Lexington, Kentucky-October 13-15, 1983

"Core Curriculum on Cardiac Ultrasound"
University of Kentucky Division of Cardiology and General Electric Company
Campbell House Inn, Lexington, Kentucky-February 20-24, 1984

"Core Curriculum on Cardiac Echo-Doppler"
University of Kentucky Division of Cardiology and General Electric Company
Campbell House Inn, Lexington, Kentucky-July 16-20, 1984

"Update in Cardiac Ultrasound"
University of Kentucky Division of Cardiology and General Electric Company
Radisson Plaza Hotel, Lexington, Kentucky-January 15-19, 1985

"Quantitation of Valvular Stenosis by Doppler Echocardiography"
Cardiology Grand Rounds, Medical College of Virginia
Richmond, Virginia-April 24, 1986

"Role of Echo-Doppler in Clinical Decision-Making"
Co-Director of the American College of Cardiology Course at Learning Center (Heart House)
Bethesda, Maryland
December 8-10, 1986
December 14-17, 1987
December 6-8, 1989
December 5-7, 1990
December 9-11, 1991
December 14-16, 1992
January 10-12, 1994
January 23-25, 1995

"Aortic Stenosis and Aortic Insufficiency"
Sixth Annual Ultrasound and Echocardiography Educational Seminar:
The Indiana Society of Ultrasound, Methodist Hospital
Indianapolis, Indiana-April 25-26, 1987

"Quantification of Mitral Stenosis", and "Relationship of Color Flow Jet Areas to Physical Exam"
1st International Conference on Cardiac Doppler and Color Flow Imaging

Dubrovnik, Yugoslavia-May 29-June 2, 1988

"Intraoperative Transesophageal Echo"

Anesthesia Grand Rounds, University of Kentucky-June 15, 1988

"Cardiac Doppler and Color Flow Imaging"

University of Kentucky Division of Cardiology and Hewlett-Packard Company-August 12-14, 1988

"Clinical Applications of Doppler Echo"

Family Medicine Review, Hyatt Regency Hotel

Lexington, Kentucky-February 22, 1989; May 24, 1989; and November 17, 1989

"Conventional and Color Flow Doppler Evaluation of Mitral Valve Disease"

Eighth Annual Ultrasound and Echocardiography Educational Seminar: The Indiana Society of Ultrasound, Indianapolis, Indiana-June 24-25, 1989

"Transesophageal Echo: A Review of the UK Experience, 1987-1989"

Cardiology Conference at Miriam Hospital, Brown University

Providence, Rhode Island-November 1, 1989

"Diagnostic and Therapeutic Advances in Cardiovascular Disease"

Transesophageal Echocardiography-Sponsored by the Kentucky Heart Institute, Hyatt Regency, Lexington, Kentucky-December 9, 1989

"Advances in Cardiovascular Disease-Color Flow, Transesophageal, and Exercise Echo Imaging"

Cardiology of Tulsa, Tulsa, Oklahoma-May 4, 1990

"Utility of Transesophageal Echo in Operative and Ambulatory Patients"Medical Grand Rounds:

Allentown General Hospital

Allentown, Pennsylvania-May 8, 1990

Kentucky Heart Institute Cardiovascular Research Forum

(poster presenter-3 abstracts): Lexington, Kentucky-May 24, 1990

"New Advances in Contrast Echo: Transpulmonary Agents, Image Processing Techniques;"

"Role of Echo-Doppler in Management Decisions in Mitral Stenosis;" "Comparison of Transesophageal and Transthoracic Echo-Doppler in the Assessment of Valvular Regurgitation and LV Ejection Fraction"

2nd International Conference on Cardiac Doppler-Echo and Color Flow Imaging

Dubrovnik, Yugoslavia-May 27-31, 1990

"Evolving Applications of Echocardiography"

Symposium: New Frontiers in Cardiac Imaging-Update 1990, Loew's Anatole Hotel, Dallas, Texas-November 11, 1990

"Application of Digital Processing Techniques to Contrast Echo"
Hospital Grand Rounds, Cleveland Clinic Foundation
Cleveland, Ohio-July 29, 1991

"Technical Aspects of Contrast Echocardiography"
Symposium Panelist: "Echo Now, Echo 2000"
Williamsburg, Virginia-September 12-15, 1991
October 8-11, 1992

"Basics of Transesophageal Echo"
Department of Medicine Rounds, Central Baptist Hospital
Lexington, Kentucky-November 20, 1991

"Timing of Intervention in Patients with Valvular Heart Disease"
Family Medicine Review Course, Hyatt Regency Hotel
Lexington, Kentucky-February 23, 1992; May 17, 1992; October 25, 1992

"Clinical Applications of Acoustic Quantification"
Philadelphia Society of Echo
Lankenau Hospital, Philadelphia, Pennsylvania-September 30, 1992

"Advances in Contrast Echocardiography"
Plenary Lecture at the Japanese College of Cardiology; 40th Annual Meetings Takamatsu,
Japan-October 16, 1992

"Potpourri of Interesting Echo Cases"
Invited lecturer at MCV Cardiology Day
Medical College of Virginia, Richmond, Virginia-October 21, 1992

"Calculation of Left Ventricular Volumes and EF by Echo"
Michigan Society of Echocardiography
Botsford Hospital, Detroit, Michigan-February 10, 1993

"Noninvasive Evaluation of the Mitral Valve and Timing for Valve Surgery" and "Specialty Panel: Cardiologist/Surgeon Teamwork in Valvular Surgery" (with Dr. Robert Salley, UKMC)
Annual Cardiovascular Update
Baptist Medical Center, Little Rock, Arkansas-February 19, 1993

Symposium panelist at "Future of Echo" Meeting, Carmel, CA-December 2-5, 1993

Symposium Panelist Echo 2000 Meetings: "Echo in Acute MI" Chateau Elan, Braselton, Georgia-October 26-29, 1995

"Dobutamine Stress Echo in Hibernating Myocardium." CT Surgery Rounds, University of Kentucky Hospital. September 17, 1997.

Case Presentation: "Marantic Endocarditis." Tumor Board. University of Kentucky. September 25, 1997.

"Transesophageal Echocardiography: Live Demonstration of Technique and Case Studies with Impact on Patient Management." Invited faculty and lecturer at American College of Cardiology Learning Center (Heart House - Bethesda, Maryland. April 15 – 17, 1998.

"Role of TEE in Intraoperative Decision Making." Faculty participant in Live Symposium and Videoconference; recorded at Heart House. April 17, 1998.

"Pitfalls in the Echo-Doppler Evaluation of Valvular Stenosis." Visiting Professor, East Carolina University, Greenville, North Carolina. April 17, 2002.

AREAS OF RESEARCH INTEREST

Digital Processing and Transmission of Echocardiographic Images
Echo Evaluation of Traumatic Aortic Injury
Use of Hand-Held Echo Imaging Devices in Teaching Physical Diagnosis

SCIENTIFIC SESSIONS

Abstract Grader for American College of Cardiology Scientific Sessions:
Echocardiography Section, March 1984, 1985, 1988, 1989, 1990, 1991, 1993, 1995, 1997, 1999.

Evaluation of Aortic Stenosis by Doppler Velocity Measurements:
Co-Chairman for Original Contribution Session
36th American College of Cardiology, New Orleans, Louisiana-March 1987

Symposium Lecture: "Assessment of Prosthetic Valve Function:
38th American College of Cardiology Scientific Session, Anaheim, California-March 1989

Intravascular Ultrasound II. Co-Chairman for Original Contribution Session:
39th American college of Cardiology, New Orleans, Louisiana-March 1990

Color Mapping I: Proximal Isovelocity Surface Area. Co-Chairman for Original Contribution Session: 39th American College of Cardiology Scientific Session, New Orleans, Louisiana-March 1990

Abstract Grader for 2nd International Congress on Cardiac Doppler-Echo and Color Flow Imaging: Dubrovnik, Yugoslavia-May 1990

Symposium Lecture: "Future Directions in Echocardiography"
Update in Cardiovascular Imaging. Sponsored by Kentucky Heart Institute, Dallas, Texas-
November 11, 1990

Meet the Experts: Transesophageal Echo/Doppler
Co-Chairman, 40th American College of Cardiology Scientific Session, Atlanta, Georgia-
March 1991

Mini-Course-"Clinical Applications of Echocardiography: Transesophageal Echo" 40th
American College of Cardiology Scientific Session, Atlanta, Georgia-March 1991

Evaluation of Prosthetic Valves. Co-Chairman for Original Contribution Session:
3rd American Society of Echocardiography Meetings, Boston, Massachusetts-June 17, 1992.

Meet the Experts Panel: "Intraoperative Assessment of the Mitral Valve Anatomy and
Function." 3rd American Society of Echo Scientific Sessions. Boston, Massachusetts-June 16,
1992.

"Experimental and Clinical Observations in Valve Disease." Co-Chairman for Original
Contributions Session: 65th American Heart Association Scientific Session, New Orleans,
Louisiana-November, 1992

Fireside Panel: "Contrast Echocardiography-Agents and Uses." 41st American College of
Cardiology Scientific Sessions, Anaheim, California-March 15, 1993

"New Developments in Contrast Echo." Co-Chairman for Original Contributions Session:
42nd American College of Cardiology Scientific Sessions, Anaheim, California-March 17,
1993

Panel Discussion Moderator: "Cardiac Source of Embolism." 4th Annual American Society of
Echocardiography Meeting, Orlando, Florida-June 17, 1993
Chairman, Poster Session. 4th Annual American Society of Echocardiographic Meetings-June
17, 1993.

"Echo Findings in Source of Embolism Patients." Meet the Experts Session. 4th Annual
American Society of Echocardiographic Meetings, Orlando, Florida-June 18, 1993.

"Echo in Trauma Patients." Critical Care Case Studies. 4th Annual American Society of
Echocardiographic Meetings, Orlando, Florida-June 16, 1993.

"Valvular Disease." Case Review. 6th Annual American Society of Echocardiography Meetings, Toronto, Canada, June 16, 1995

"Use of Transesophageal Echo in Trauma Patients". Symposium Lecture: 45th American College of Cardiology Meetings, Orlando, Florida, March 26, 1996

"Echocardiography in Management of Acute Myocardial Infarction Patients". Luncheon Panel: 45th American College of Cardiology Meetings, Orlando, Florida, March 27, 1996

Moderator, Poster Session "Myocardial Function". 7th Annual American Society of Echocardiography, Chicago, Illinois, June 11, 1996

"Advances in Quantitation of Valvular Regurgitation". Chairman and Moderator. 8th Annual American Society of Echocardiography, Orlando, FL-June 12-15, 1997.

Chairman, Abstract Session: Vibrations and Reverberations: The Resounding Effects of Noninvasive Testing. American College of Chest Physicians. New Orleans, LA. October 29, 1997.

"Echocardiography in the Emergency Room." Chairman, Meet the Experts Session: 9th Annual American Society of Echocardiography Meetings, San Francisco, CA. June 12, 1998.

Abstract Grader for 64th American College of Chest Physicians Scientific Session: Echocardiography Section. November 1998, 1999, 2000, 2003.

"Emergency Echocardiography." Panel, Meet the Experts Session: 10th Annual American Society of Echocardiography Meetings, Washington, D.C., June 10-12, 1999.

"Transesophageal Echo in the Intensive Care Unit." 4th World Congress of Echocardiography. Cairo, Egypt. January 19-21, 2000.

"Prosthetic Heart Valves" TTE and TEE." Chairman, Plenary Session 11th Annual American Society of Echocardiography Meetings, Chicago, IL. June 11-14, 2000.

"Echocardiographic Approach to Selection of Patients for Mitral Valve Repair." Chairman and Presenter, 50th Annual American College of Cardiology Meeting, Orlando, FL. March 19, 2001.

"Echo Evaluation of Diastolic Function." Chairman and Moderator, 74th American Heart Association Scientific Sessions; Anaheim, CA. November 12, 2001.

“Pitfalls in the Noninvasive and Invasive Evaluation of Valve Stenosis.” Co-Chairman and Presenter, 51st Annual American College of Cardiology Meeting, Atlanta, GA. March 19, 2002.

Abstract Grader, Echo Section, 76th American Heart Association Scientific Sessions, November 2003.

BIBLIOGRAPHY

Published Papers

1. Smith MD, Sagar KB, Mauck P, Cowley MJ, and Lower RR: Surgical Correction of Congenital Tricuspid Stenosis. **Ann Thorac Surg** 1982;34:329-32.
2. Smith MD, Mohanty PK, Craddock CT, Hassan ZU: Atrial Septal Defect: An Unusual Case With Two Separate Defects. **J Clin Ultrasound** 1983;11:289-91.
3. Smith MD, Romhilt DW: Atrial Dissociation. **Virginia Med** 1983;110:177-78.
4. DeMaria AN, Bommer W, Kwan OL, Riggs K, Smith MD, Waters JS: In Vivo Correlation of Thermodilution Cardiac Output and Videodensitometric Indicator Dilution Curves Obtained From Contrast Two-Dimensional Echocardiograms. **J Am Coll Cardiol** 1984;3:992-98.
5. Smith MD, Cowley MJ, Vetrovec GW: Aneurysms Of The Left Main Coronary Artery: A Report of Three Cases and Review of the Literature. **Cath and Cardiovasc Diag** 1984;10:583-91.
6. Smith MD, Kwan OL, DeMaria AN: The Role of Echocardiography in Infective Endocarditis. **Pract Cardiol** 1984;10:78-110.
7. Smith MD, Kwan OL, Reiser HJ, DeMaria AN: Superior Intensity and Reproducibility of SHU-454, a New Right Heart Contrast Agent. **J Am Coll Cardiol** 1984;3:992-99.
8. DeMaria AN, Smith MD, Kwan OL: Doppler Flow Imaging: Another Step in the Evolution of Cardiac Ultrasound. **Echocardiography** 1985;2:295-500.
9. Smith MD, Waters JS, Kwan OL, DeMaria AN: Evaluation of Pericardial Compressive Disorders by Echocardiography. **Echocardiography** 1985;2:67-86.
10. Smith MD, Dawson PL, Elion JL, Booth DC, Kwan OL, Earle GF, DeMaria AN: Correlation of Continuous Wave Doppler Velocities with Cardiac Catheterization Gradients: An Experimental Model of Aortic Stenosis. **J Am Coll Cardiol** 1985;6:1306-14.

11. Clifton GD, Smith MD: Thrombolytic Therapy in Heparin-Associated Thrombocytopenia with Thrombosis. **Clin Pharm** 1986;5:597-601.
12. DeMaria AN, Smith MD, Branco M, Kwan OL: Normal and Abnormal Blood Flow Patterns by Color Doppler Flow Imaging. **Echocardiography** 1986;3:475-82.
13. Grayburn PA, Smith MD, Handshoe R, Friedman BJ, Handshoe S, DeMaria AN: Detection of Aortic Insufficiency by Standard Echocardiography, Pulsed Doppler Echocardiography, and Auscultation. **Ann Intern Med** 1986; 194:599-605.
14. Handshoe R, Nissen S, Smith MD, DeMaria AN: Mural Thrombi: Role of Two-Dimensional Echocardiography in Diagnosis and Management. **Cardiovasc Rev and Rep** 1986;7:183-96.
15. Harrison MR, Smith MD, O'Connor WN, DeMaria AN: Post-Operative Valve Ring Aneurysm Formation, Coronary Arteritis, and Myocardial Infarction in Systemic Lupus Erythematosus. **Am Heart J** 1986;112:414-17.
16. Smith MD, Dawson PL, Elion JI, Wisenbaugh T, Kwan OL, Handshoe S, DeMaria AN: Systematic Correlation of Continuous-Wave Doppler and Hemodynamic Measurements in Patients with Aortic Stenosis. **Am Heart J** 1986;111:245-52.
17. Smith MD, DeMaria AN: Value and Limitations of Continuous-Wave Doppler Echocardiography in Estimating Severity of Valvular Stenosis. **JAMA** 1986;255:3145-51.
18. Smith MD, Handshoe R, Handshoe S, Kwan OL, DeMaria AN: Comparative Accuracy of Two-Dimensional Echocardiography and Doppler Pressure Half-Time in Assessing Severity of Mitral Stenosis in Patients With and Without Prior Commissurotomy. **Circulation** 1986;73:100-107.
19. Smith MD, DeMaria AN: Mitral Stenosis: Assessment with Two-Dimensional Echocardiography and Doppler Methods. **Cardiol Board Rev** 1986;3:74-84.
20. Spain M, Smith MD, DeMaria AN: Echocardiography: Options for 1987. **Diagnosis** 1986;8:72-78.
21. DeMaria AN, Smith MD: Color Doppler Flow Imaging 1987: State of Integration in the Echocardiography Laboratory. **Echocardiography** 1987;4:465-67.
22. DeMaria AN, Spain M, Garrahy P, Grayburn PA, Kwan OL, Smith MD: Considerations in the Quantitation of Color Flow Doppler Imaging. **Echocardiography** 1987;4:495-501.

23. Grayburn PA, Handshoe R, Smith MD, Harrison MR, DeMaria AN: Quantitative Assessment of the Hemodynamic Consequences of Aortic Regurgitation by Means of Continuous Wave Doppler Recordings. **J Am Coll Cardiol** 1987;10:135-41.
24. Grayburn PA, Smith MD, Gurley JC, Booth DC, 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;60:322-26.
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