

CURRICULUM VITAE

EDMUND KENNETH KERUT, MD, FACC, FASE

EDUCATION:	1978	Bachelor of Science Mississippi State University (with Special Distinction) Major: Biological Engineering Minor: Mathematics
	1982	Medical Doctor University of Mississippi School of Medicine Jackson, Mississippi
Internship:	1982-1983	Internal Medicine Medical University of South Carolina Charleston, South Carolina
Residency:	1983-1985	Internal Medicine Medical University of South Carolina Charleston, South Carolina
Fellowship:	1985-1987	Cardiovascular Diseases University of Maryland Baltimore, Maryland

PRIVATE CARDIOLOGY PRACTICE:

7/87-5/90	Cardiology Center Marrero, LA
5/90-6/94	HeartCare Clinic Marrero, LA
6/94-Present	Heart Clinic of Louisiana/ Heart Clinic of Louisiana Diagnostic Services Marrero, LA

CERTIFICATION:

September 1985	Diplomate, American Board of Internal Medicine
November 1987	Diplomate, American Board of Internal Medicine Cardiovascular Diseases (95th Percentile)
June 1996	American Society of Echocardiography Certification/Special Competency Examination (93rd Percentile)

6/96-6/06 Diplomate in Adult Transthoracic + Transesophageal Echocardiography

November 2002 Fellow of the American Society of Echocardiography
(FASE)

LICENSURE:

Medical Mississippi, South Carolina, Louisiana

Nuclear Louisiana

CURRENT STAFF PRIVILEGES: West Jefferson Medical Center
Marrero, Louisiana

Meadowcrest Hospital
Gretna, Louisiana

Medical Center of Louisiana
(Charity System)
New Orleans, Louisiana

MAJOR CLINICAL INTERESTS: Echocardiography
Transesophageal Echocardiography

RESEARCH INTERESTS: Heart Rate Variability
(Computer Algorithms and processing)

Texture Analysis of Myocardium
(Computer algorithms and processing)

Echocardiography of the Rat and Mouse

Echocardiography and Heart Failure

PROFESSIONAL APPOINTMENTS:

Adjunct Assistant Professor
Department of Physiology
Department of Pharmacology
LSU Health Sciences Center
New Orleans, Louisiana
(July, 2004 -)

Adjunct Professor of Engineering
Department of Agricultural and Biological Engineering
Mississippi State University
Mississippi State, Mississippi
(July, 2001 -)

Clinical Associate Professor of

Medicine, (1996 - Present)
 Tulane University
 School of Medicine
 New Orleans, Louisiana

Clinical Assistant Professor of
 Medicine, (1991 - Present)
 Louisiana State University
 School of Medicine
 New Orleans, Louisiana

Louisiana Chapter,
 American College of Cardiology
 -New Orleans District Councilor
 (1999-2001)
 (Re-elected 2001-2003, 2003-2005)
 -Quality Committee (2004-)
 -Education Committee (2004-)

Director, Echocardiography
 Laboratory, (1991 - 1996)
 Medical Center of Louisiana
 Charity Hospital
 New Orleans, Louisiana

Cardiovascular Research
 Laboratory, (1993 - Present)
 Louisiana State University
 School of Medicine
 New Orleans, Louisiana

Graduate School Advisor
 Department of Agricultural and Biological Engineering
 School of Engineering
 Mississippi State University
 Mississippi State, Mississippi
 (1999 -)

Course Director and Instructor,
 Advanced Cardiac Life Support
 West Jefferson Medical Center
 Marrero, Louisiana
 Louisiana Chapter,
 American Heart Association
 (1991 - Present)

Chairman, Institutional Review Board
 West Jefferson Medical Center
 Marrero, Louisiana
 (November 2003 -)

Chief of Medicine, 1990 - 1991
Meadowcrest Hospital
Gretna, Louisiana

Medical Director
West Jefferson Health Center
West Jefferson Medical Center
Marrero, Louisiana
(2000-)

Director, Clinical Trials
Heart Clinic of Louisiana
Marrero, Louisiana
(6/94-)

PROFESSIONAL MEMBERSHIPS:

American College of Cardiology
American Heart Association
American Society of Echocardiography
Institute of Electrical and Electronics Engineers
Christian Medical and Dental Association
President (Charter) (1997 -)
New Orleans Society of Echocardiography

HONORS & AWARDS:

Young Faculty Award (1996)
Southern Section of American Federation of Clinical Research
Southern Society for Clinical Investigation
Tau Beta Pi
Phi Kappa Phi
Gamma Sigma Delta
Engineering Council (1977-1978, Mississippi State University)
Freshman General Chemistry Award, 1975
ACT Scholarship, 1974

PUBLICATIONS

Abstracts

1. Harch PG, Kerut EK, Van Meter K. Demonstration and Explanation of the Breach of the Pulmonary Filter with Transesophageal Bubble Contrast Echocardiography. Undersea Biomedical Research, 1992, (19:suppl.), 41.
2. Truax W, Borresen T, Kerut EK, Van Meter K. Transcranial Doppler Ultrasonography in Decompression Illness. Stroke (23) 475, 1992.

3. Kerut, EK et al., Congestive Heart Failure (CHF): Influence of Hypertension with and without Diabetes Mellitus on Circadian Variation in Autonomic Balance. Presented at the Louisiana Chapter of the American College of Cardiology, New Orleans, Louisiana; October, 1994.
4. Kerut, EK et al., Congestive Heart Failure (CHF): Influence of Hypertension with and without Diabetes Mellitus on Circadian Variation in Autonomic Balance. *Journal of Investigative Medicine* 43 (1), Suppl 2.Feb 1995, 27A.
5. Kerut, EK et al., Congestive Heart Failure (CHF): Influence of Hypertension with and without Diabetes Mellitus on Circadian Variation in Autonomic Balance. *American J of Hypertension* 8 (4), Part 2: 174A,1995.
6. Kerut, EK et al., The Echocardiographic Characteristics of Dilated Cardiomyopathy and Advanced Heart Failure are Influenced by Hypertension and Diabetes. *American J of Hypertension* 8 (4), Part 2: 174A,1995.
7. Kerut, EK et al., The Echocardiographic Characteristics of Dilated Cardiomyopathy and Advanced Heart Failure are Influenced by Hypertension and Diabetes. XVI Congress of the Society of Cardiology of the State of Sao Paulo, Brazil, June 1995.
8. Kerut, EK, et al., Patent Foramen Ovale (PFO) and Decompression Sickness (DCS). *J of the Undersea and Hyperbaric Medical Society* 22, Suppl., June 1995, 48.
9. Kerut, EK, Given M, McIlwain E, Allen G, Greenberg SS, Giles T. Echocardiographic Study of Cardiac Changes in Hypertensive and Spontaneously Diabetic Rats. *Journal of Investigative Medicine* 44 (1), Jan 1996, 55A.
10. Kerut EK, Truax W, Borresen T, Van Meter K, McIlwain E, Allen G, Given M, Giles T. Transcranial Contrast Doppler Improves Assessment of Patent Foramen Ovale Significance in Divers with Decompression Sickness. *Journal of Investigative Medicine* 44 (1), Jan 1996, 2A.
11. Kerut EK, Truax W, Borresen T, Van Meter K, Given M, Giles T. Transcranial Contrast Doppler Improves Assessment of Patent Foramen Ovale Significance in Divers with Decompression Sickness. *JACC Vol 27 (2 suppl A)* Feb 1996, 350A.
12. Greenberg SS, Jie O, Kerut EK, Given M, Giles TG. Protein Kinase C Isozyme Shifts and Alcoholic Cardiomyopathy. Scientific Conference on the Molecular Biology of the Normal, Hypertrophied, and Failing Heart. Snowbird Conference Center; Salt Lake City, Utah, August 1996
13. Giles TD, Jie O, Kerut EK, Given M, Greenberg SS. Protein Kinase C and Right Ventricular Dysfunction in Genetically Diabetic Rats. Scientific Conference on the Molecular Biology of the Normal, Hypertrophied, and Failing Heart. Snowbird Conference Center; Salt Lake City, Utah, August 1996
14. Greenberg SS, McIlwain E, Allen G, Kerut EK, Zhein M, Luo Q, Powers DR, Giles TD. Characterization of Hypertension Resulting from Chronic Alcohol Ingestion in Rats. *American J of Hypertension* Vol 10, April 1997, 99A.
15. Sander GE, Ryan DH, Bray GA, Greenberg SS, Kerut EK, Giles TD. Fenfluramine Combination Therapy for Obesity: The Appearance Rate of Aortic Regurgitation on Serial Echoes Parallels the Incidence in a Larger Cohort Population. *JACC Vol 31 (Suppl A)*, February 1998, 151A.

16. Sander GE, Ryan DH, Bray GA, Greenberg SS, Kerut EK, Giles TD. Fenfluramine Combination Therapy for Obesity: The Appearance Rate of Aortic Regurgitation on Serial Echoes Parallels the Incidence in a Larger Cohort Population. *Journal of Investigative Medicine*; Vol 46 (1), 31A, 1998.
17. Kerut EK, Roffidal LE, Jones R, Harris L, Subramanian P, Tresznewsky O, Hutchinson H, Yount D, Given MB, Giles TD. Higher Dose ACE Inhibitor Therapy Has A Favorable Influence on Heart Rate Variability (HRV) and Circadian Systolic Blood Pressure Variability in Congestive Heart Failure (CHF): A Substudy of the Assessment of Lisinopril in Heart Failure (ATLAS) Trial. *Circulation*; Vol 98, No 17, 1998, I-83.
18. Greenberg SS, Kang B, Parrish C, Jie O, Zhao X, Kerut EK, Giles TD. Changes in Mesenteric Vascular Reactivity and Blood Pressure during Chronic Alcohol Ingestion and Withdrawal. *JACC Vol 33 (Suppl A)*, February 1999, 305A.
19. Ruiz FJ, Azarbal B, Kerut EK, Talano JV. Clinical Application of an Echocardiographic Protocol in the Setting of Acute Chest Pain in the Emergency Department: A Four-Phase Methodology. *Journal of Investigative Medicine*; 110A, 1999.
20. Kerut EK, Given M, McIlwain E, Allen G, Greenberg SS, Giles T. Analysis of Echocardiographic Image Texture Utilizing a 2-Dimensional Wavelet Transform in Rodent Models of Cardiomyopathy. *J of Investigative Medicine*; 127A, 1999.
21. Rouleau JL, Pfeffer MA, Stewart D, Kerut EK, Prouix G, Porter CB, Qian C, Harvey L, Block AJ. Vasopeptidase Inhibitor or Angiotensin Converting Enzyme Inhibitor in Heart Failure? Results of the IMPRESS Trial. *Circulation*; 100(18);I-782; 1999.
22. Kerut EK, Giles TD. The Clinical Significance of PFO and Importance of Determining Its Size: A Review. *Aerospace Medical Association*; 71st Annual Scientific Meeting, Houston, Texas; 379; 2000.
23. Rouleau JL, Pfeffer MA, Stewart DJ, Kerut EK, Porter CB, Parker JO, Smith LK, Prouix G, Qian C, Block AJ. Effects of Omapatrilat and Lisinopril on Renal Function in Patients with Heart Failure. *Circulation*; 102(18): II-533; 2000.
24. Florek RS, Kerut EK, Everson CT, Workman M. CT Directed Catheter Drainage of an Infected Ventriculo-Aortic Conduit. *Southern Medical Association*; October 2000; Vol 93(10); S102.
25. To F, Ji W, Kerut EK, Giles TD. Wavelet Method of Observing the Efficacy of Lisinopril. *Institute for Biological Engineering*; 2001 Annual Meeting, Sacramento, California; August 2001.
26. JG Diez, J Aliota, EK Kerut. In Vivo Characterization of Coronary Plaque via Computer Assisted Intravascular Ultrasound Image Analysis. *Am J Cardiol* 2003; 92 (Suppl 6A):16, 7L
27. Rawal M, Kerut EK, Callister TQ, Raggi P. Coronary Artery Texture on Electron Beam Tomography is Similar in Patients With Risk Factors and no Calcification and Patients With Calcifications. *Louisiana Chapter of the American College of Cardiology, New Orleans, Louisiana. December 2003*
28. Rawal M, Kerut EK, Callister TQ, Raggi P. Detection of Early Plaque on Calcium Negative Electron Beam Tomography Scans Using Wavelet Analysis to characterize Tissue Texture. *Louisiana Chapter of the American College of Cardiology, New Orleans, Louisiana. December 2003*

29. Yaneza LO, Kerut EK, Charalampidis D, Chrisman D, Lujan MS, Giles TD, Chilton RJ, O'Rourke RA. Atherosclerotic Plaque Can Be Quantified Using Multifractal And Wavelet Decomposition Techniques. *JACC suppl A*; 43(5): 34A (1006-57) 2004.
30. To SDF, Dabisch PA, Kerut EK, Scotto JA, Jarvis JR, Mio RJ. Time and Frequency Domain and Wavelet Analysis of Cardiac Interbeat Intervals in the Laboratory Rat. *Proceedings of the International Federation for Medical and Biological Engineering; Kuala Lumpur International Conference on Biomedical Engineering*, Sept 2004; Kuala Lumpur, Malaysia.
31. Dabisch PA, To SDF, Kerut EK, Miller DB, Burnett DC, Jakubowski EM, Muse WT, Davis EA, Benton BJ, Hulet SW, Whalley CE, Giles TD, Mioduszewski RJ, Thomson SA. Tolerance to the ocular and cardiovascular effects of repeated low-level exposure to Sarin Vapor. *Proceedings of the 24th Army Sciences Conference*, Orlando, FL, Nov. 29- Dec. 2, 2004.
32. Haque M, Hartfield J, McIlwain E, Kerut EK, Francis J. A Novel Role for Cytokines in Fluid Regulation in Heart Failure Mice. *Circulation Suppl* 110(17): (1410) Nov 2004
33. Dalati G, Kelley GP, Dalati F, Helmcke F, Glancy DL, Kerut EK. Color Doppler Differentiation of Physiological From Pathological Mitral Regurgitation (MR): Avoiding the Fabrication of MR. Louisiana Chapter of the American College of Cardiology, New Orleans, Louisiana. December 2004.
34. Hartfield JN, Haque M, McIlwain E, Kerut EK, Francis J. Angiotensin II Induced Effect on Salt Appetite and Thirst is Mediated Through Cytokines. *FASEB Journal*, San Diego, California. April 2005.

Articles

1. Kerut EK, Transesophageal Echocardiography: What Is It and What are the Indications for Its Use *Journal of the Louisiana State Medical Society*, February 1992,69-76.
2. Kerut EK, Truax WD, Borreson TE, Van Meter KW, Given MB, Giles TD. Detection of Right-to-Left Shunts in Decompression Sickness in Divers. *American Journal of Cardiology*, Vol. 79, Feb. 1, 1997, 377-378.
3. Giles TG, Ouyang J, Kerut EK, Given MB, Allen GE, McIlwain EF, Greenberg SS. Changes in Protein C in Early Cardiomyopathy and in Gracilis Muscle in the BB/Wor diabetic rat. *American Journal of Physiology*, Vol 274 (1), 1998, 4295-4307.
4. Kerut EK. Novel Application of Tissue Doppler Imaging: A Preliminary Observational Study. *Echocardiography*, Vol 15 (6), 1998,553-561.
5. Aslam AA, McIlwain EF, Talano JV, Ferguson TB, McKinnie J, Kerut EK. An Unusual Case of Embolic Stroke: A Permanent Ventricular Pacemaker Lead Entirely Within the Arterial System Documented by Transthoracic and Transesophageal Echocardiography. *Echocardiography*, Vol 16(4), 1999, 373-378.
6. Kerut EK, McKinnie JJ, Giles TD. Modern Evaluation of the Hypertensive Patient: Autonomic tone in cardiovascular disease and the assessment of heart rate variability. *Blood Pressure Monitoring* 1999, Vol 4(suppl 1): S7-S14.

7. Dearstine M, Taylor W, Kerut EK. Persistent Left Superior Vena Cava: Chest X-Ray and Echocardiographic Findings. *Echocardiography*, Vol 17(5), 2000, 453-455.
8. Kerut EK, Given MB, McIlwain E, Allen G, Espinoza C, Giles TD. Echocardiographic Texture Analysis Using the Wavelet Transform: Differentiation of Early Heart Muscle Disease. *Ultrasound in Medicine and Biology*, Vol 26, issue 9 (December 2000), 1445-1453.
9. Rouleau JL, Pfeffer MA, Stewart D, Isaac D, Sestier F, Kerut EK, Porter CB, Proulx, Qian C, Block AJ. Comparison of Vasopeptidase Inhibitor, Omapatrilat, and Lisinopril on Exercise Tolerance and Morbidity in Patients with Heart Failure: IMPRESS Randomised Trial. *Lancet*, Vol. 356 (August 19, 2000): 615-620.
10. Giles TD, Kerut EK, Roffidal LE, Jones R, Given MB, Hutchinson H, Tresznewsky O. The Influence of Dose of Angiotensin I-Converting Enzyme Inhibitor on Systolic Blood Pressure Variability in Heart Failure: A Substudy of the Assessment of Treatment with Lisinopril and Survival in Heart Failure (ATLAS) Trial. *Blood Pressure Monitoring* 2001; 6: 81-84.
11. Kerut EK, Hanawalt C, Everson CT, Frank RA, Giles TD. Left Ventricular Apex to Descending Aorta Valved Conduit: Description of Transthoracic and Transesophageal Echocardiography Findings in Four Cases. *Echocardiography* 2001; 18(6): 463-468.
12. Kerut EK, Norfleet WT, Plotnick GD, Giles TD. Patent Foramen Ovale: A Review of Associated Conditions and the Impact of Physiological Size. *Journal of the American College of Cardiology* 2001; 38(3): 613-623
13. Kerut EK, Dearstine M, Everson CT, Giles TD. Left Atrial Septum Thrombus Masquerading as a Myxoma in a Patient with Aortic Stenosis in Sinus Rhythm. *Echocardiography* 2001; 18(8): 709-710.
14. Giles TD, Given MB, Greenberg SS, Zhao X, Kerut EK, McIlwain E, Allen G. Myocardial Effects of Ethanol Consumption in the Rat with Streptozotocin-Induced Diabetes. *Alcoholism: Clinical and Experimental Research* 2002; 26(8):.
15. Kerut EK, Given M, Giles TD. Review of Methods For Texture Analysis of Myocardium From Echocardiographic Images: A Means of Tissue Characterization. *Echocardiography* 2003; 20(8): 727-736.
16. Pellett A, Kerut EK. The Chiari Network In An Echocardiography Student. *Echocardiography*, 2004; 21(1): 91-93.
17. Pellett A, Kerut EK. The Doppler Equation. *Echocardiography* 2004; 21(2): 197-198.
18. Hales WD, Sandhu SK, Kerut EK. The Amplatzer Septal Occluder As a Standard For Therapy of Secundum-Type Atrial Septal Defect. *Journal of the Louisiana State Medical Society* 2004; 156(2): 99-102.
19. Batson RC, Falterman CJ, Craven J, Kerut EK. How to Perform Ultrasound Assisted Thrombin Injection for Closure of Iatrogenic Femoral Pseudoaneurysm. *Echocardiography* 2004; 21(3): 295-297.
20. Kerut EK, Valina CM, Luka T, Pinkernell K, Delafontaine P, Alt EU. Technique and Imaging for Transthoracic Echocardiography of the Laboratory Pig. *Echocardiography* 2004; 21(5): 439-442.

21. Kelley GP, Helmcke F, Kerut EK. Structural Complications of Native Aortic Valve Endocarditis. *Echocardiography* 2004; 21(4): 345-348.
22. Tirrito SJ, Augustine DR, Kerut EK. How to Measure Left Atrial Volume. *Echocardiography* 2004; 21(6): 569-571.
23. Pellett A, Kerut EK. The Tei Index: Methodology and Disease State Values. *Echocardiography* 2004; 21(7): 669-672.
24. Pellett AA, Tolar WG, Merwin DG, Kerut EK. Spectral Doppler Instrumentation. *Echocardiography* 2004; 21(8): 759-761.
25. Tirrito SJ, Kerut EK. How Not to Miss a Bicuspid Aortic Valve in the Echocardiography Laboratory. *Echocardiography*, in Press.
26. Dabisch PA, Kerut EK, Liles JT, Wien G, Smith M, Patterson M, McCoul ED, Sears BW, Saenz R, Kadowitz PJ. Responses to Bradykinin are Mediated by NO-Independent Mechanisms in the Rat Hindlimb Vascular Bed. *Pharmacological Research* 2004 Dec; 50(6): 575-584.
27. Nachimuthu S, Ashby K, Humphers SG, Balasundaran P, Kerut EK. Utility of Echocardiography and Serum Troponin Levels in Pulmonary Embolism. *Echocardiography*, in Press.
28. Reagan BW, Kerut EK. Patient-Prosthetic Aortic Valve Mismatch: Role of the Echocardiographer. *Echocardiography*, in Press.
29. Daveron E, Jain N, Luer WH, Fermin C, Helmcke F, Kerut EK. Papillary Fibroelastoma and Lambl's Excrescences: Echocardiographic Diagnosis and Differential Diagnosis. *Echocardiography*, in Press.
30. Reagan BW, Helmcke F, Kerut EK. Commonly Used Respiratory and Pharmacological Interventions in the Echocardiography Laboratory. *Echocardiography*, in Press.
31. Pellett AA, Tolar WG, Merwin DG, Kerut EK. Doppler Aliasing. *Echocardiography*, in Press.

Journal Editor

Section Editor - "Echo Rounds", *Echocardiography: A Journal of Cardiovascular Ultrasound and Allied Techniques*; January 2004 -

Senior Associate Editor – *Echocardiography: A Journal of Cardiovascular Ultrasound and Allied Techniques*; January 2005 -

Books and Book Chapters

1. Giles T and Kerut EK.
"Restrictive and Obliterative Cardiomyopathy"
Book Chapter in: *Cardiology*
Parmley and Chatterjee - Editors

Lippincott Publishers
Philadelphia, 1996.

2. Kerut EK, McIlwain EF, Plotnick GD.
"Handbook of Echo-Doppler Interpretation"
Futura Medical Publishing
Armonk, New York, 1996.
(English, Spanish, Italian, Portuguese)
First Printing 1996
Second Printing 2000
3. Kerut EK, McIlwain ER, Plotnick GD, Giles T.
"Video Case Studies of Echocardiography: An Interactive CD-ROM"
Futura Medical Publishing
Armonk, New York, 2000
4. Kerut EK, McIlwain EF, Plotnick GD
"Handbook of Echo-Doppler Interpretation"
2nd Edition
Blackwell Futura Publishing
Elmsford, New York, 2004
(English, Portuguese)

Technical Papers (White Paper)

1. "Novel Application of Tissue Doppler Imaging"
Toshiba Corporation
Toshiba Corporation Medical Systems Division, 1997.
Tustin, California, 1997.

PATENT

Method and Apparatus for the Early Detection of Tissue Pathology Using Wavelet Transformation
July 2002 -# 09/414,123 (Edmund K. Kerut) United States, Canada, Europe, Japan

JOURNAL REVIEWER

1. Echocardiography (1997-)
2. Journal of the American Society of Echocardiography (2001-)

SPEAKER'S BUREAU

1. Merck (1996-)
2. Parke-Davis (1997-)
3. Pfizer (1999-)

4. SmithKline Beecham (1999 -)
5. Novartis (2002 -)
6. AstraZeneca (2003 -)

**PAST RESEARCH PROJECTS &
GRANT SUPPORT:**

- | | |
|---------------------|---|
| 10/05/81 - 11/20/81 | National Institutes of Health Externship - Computers in Clinical Medicine
Bethesda, Maryland |
| 5/79 - 8/79 | Research Assistant Engineering Foundation Grant
(RC-A-77-1) |
| 1/78 - 8/78 | Research Assistant National Institutes of Health Grant
(HD 12382-01) |
| 5/78 | Pressure transducer design for a left ventricular assist device (Senior Undergraduate Engineer Project) |

COMPUTER PROGRAMS WRITTEN:

Analysis of Myocardial Texture Programs
Cardiovascular Research Laboratory
LSU School of Medicine
New Orleans, Louisiana, 1998
(Statistical, frequency domain and wavelet analysis – MATLAB)

Analysis of Heart Rate Variability Programs
Cardiovascular Research Laboratory, LSU School of Medicine
New Orleans, Louisiana, 1998
(Time and frequency domain analysis of heart rate variability – MATLAB)

Analysis of Heart Rate Variability Programs
Cardiovascular Research Laboratory, LSU School of Medicine
New Orleans, Louisiana, 1997
(Time and frequency domain analysis of heart rate variability - DADiSP 4.0)

A Computer Program for Analysis of the Rat Electrocardiogram
National Institutes of Health; November, 1981
(Time series and spectral analysis of the rat electrocardiogram and vectorcardiogram – FORTRAN code)

Time Series Analysis of Biological Phenomena
Department of Agricultural and Biological Engineering

Mississippi State University; August, 1979
 (Time series and spectral analysis of canine electrocardiogram and
 phonocardiogram data - FORTRAN code)

Time Series Analysis of Reproductive Tract Motility
 Department of Agricultural and Biological Engineering
 Mississippi State University; August 1978
 (Time series and spectral analysis of baboon cervical motility -
 FORTRAN code)

Simulation of a Medical Clinic
 Department of Agricultural and Biological Engineering
 Mississippi State University, 1978
 Senior Undergraduate Computer Project
 (Discrete event simulation of a multi-physician medical clinic -
 SIMSCRIPT language)

INVITED LECTURES and CONFERENCES:

"Clinical Use of Transesophageal Echocardiography"
 Medicine Grand Rounds, LSU Medical Center
 New Orleans, Louisiana (July, 1990)

"Uses of Transesophageal Echocardiography"
 Gulf Coast Community Hospital
 Biloxi, Mississippi (August, 1990)

"Transesophageal Echocardiography"
 The Internal Medicine Group
 New Orleans, Louisiana (December, 1991)

"Transesophageal Echocardiography"
 Trident Regional Medical Center
 Charleston, South Carolina (February, 1991)

"Transesophageal Echocardiography: Emergency
 and Diving Medicine"
 LSUMC Emergency Medicine Conference
 LSU School of Medicine
 New Orleans, LA (June, 1992)

"Transesophageal Echocardiography"
 Medicine Grand Rounds, LSU Medical Center
 New Orleans, LA (July, 1992)

"Transesophageal Echocardiography"
 Meadowcrest Hospital
 Gretna, LA (November, 1992)

"Techniques: Echocardiography"

New Orleans Cardiology Board Review
 LSU School of Medicine
 New Orleans, Louisiana (October, 1993)

"Clinical Application of Transesophageal Echocardiography"
 Cardiology Grand Rounds, LSU Medical Center
 New Orleans, Louisiana (April, 1994)

"The Echocardiography Laboratory of the 90's"
 Meadowcrest Hospital
 Gretna, Louisiana (July, 1994)

"An Intense Review of Advanced Echo-Doppler Concepts:
 Techniques and Interpretation"
 Course Director, West Jefferson Medical Center
 Marrero, Louisiana (September, 1994)

"The Echocardiography Laboratory of the 90's"
 Medicine Grand Rounds, LSU Medical Center
 New Orleans, Louisiana (September, 1994)

"Transesophageal Echocardiography in the Operating Room"
 Tulane University Anesthesia Department
 New Orleans, Louisiana (September, 1994)

"The Echocardiography Laboratory of the 90's"
 Cardiology for the Primary Care Physician
 LSU School of Medicine
 New Orleans, Louisiana (December, 1994)

"Transesophageal Echocardiography"
 Tulane University Anesthesia Department
 New Orleans, Louisiana (June, 1995)

"Heart Failure: The Echocardiographer's Perspective"
 Cardiology Grand Rounds, LSU Medical Center
 New Orleans, Louisiana (June, 1995)

"Techniques: Echocardiography"
 New Orleans Cardiology Board Review
 LSU School of Medicine
 New Orleans, Louisiana (October, 1995)

"Heart Failure: The Echocardiographer's Perspective"
 Cardiology Conference, Tulane University Cardiology Department
 New Orleans, Louisiana (October, 1996)

"Echocardiography in the 1990's"

Medicine Conference, Tulane University Medicine Department
New Orleans, Louisiana (October, 1996)

"Echocardiography in the 1990's"
Medical Staff Conference, West Jefferson Medical Center
Marrero, Louisiana (October, 1996)

"Echocardiographic Evaluation of Masses, Pseudo-masses,
Tumors, and Source of Embolism"
Cardiology Grand Rounds, Tulane University Cardiology Department
New Orleans, Louisiana (February, 1997)

"Hemodynamic Equations, Systolic and Diastolic Function,
Tissue Doppler Imaging"

"Prosthetic Heart Valves and Conduits"

"Source of Embolism, Evaluation Prior to Cardioversion"

"Infective Endocarditis"

"Critical Care"

"Tutorial: Interesting Cases"

Echo New Orleans - Course Co-Director
Tulane University School of Medicine
New Orleans, Louisiana (April, 1997)

"Assessment of Prosthetic Valves"

"TEE in SBE and Embolism"

The New Orleans 1997 American Society of Echocardiography
Special Competency Exam in Echocardiography Review Course
New Orleans, Louisiana (May, 1997)

"Prosthetic Heart Valves"

Cardiology Grand Rounds, Tulane University Cardiology Department
New Orleans, Louisiana (June, 1997)

"Echocardiography for the Primary Care Physician"

Meadowcrest Hospital
Gretna, Louisiana (August, 1997)

"Echo Hemodynamics and Equations"

Basic Science and Pathophysiology Seminar
Tulane University Medicine Department
New Orleans, Louisiana (August, 1997)

"Techniques: Echocardiography"

New Orleans Cardiology Board Review, LSU School of Medicine
New Orleans, Louisiana (September, 1997)

"Masses, Pseudomasses, Tumors in Echocardiography"

Cardiology Grand Rounds, Tulane University Cardiology Department
New Orleans, Louisiana (October, 1997)

"Echo Hemodynamics and Equations/Practical Application of LV Function"

"Tumors, Pseudotumors, Clots: Importance of Adding TEE"

"Source of Embolism and Atrial Fibrillation: Role of TEE"

"Endocarditis: The Role of Echo and TEE"

"Prosthetic Valves and Conduits: Is TEE Necessary"

"Tutorial: Interesting Case Studies: Native and Prosthetic Valve Disease"

"Tutorial: Interesting Case Studies: Cardiomyopathy, Congenital, Source of Embolism, Masses"

Echo New Orleans - Course Co-Director

Tulane University School of Medicine

New Orleans, Louisiana (April, 1998)

"Role of Echo in CV Risk Assessment"

Current Concepts in Cardiovascular Risk Assessment

LSU School of Medicine

New Orleans, Louisiana, (July, 1998)

"Research in Heart Rate Variability and Myocardial Texture"

Department of Agricultural and Biological Engineering

School of Engineering

Mississippi State University

Mississippi State, Mississippi (September, 1998)

"Echocardiography Indications"

Residents Noon Lecture, Department of Medicine

Tulane University School of Medicine

New Orleans, Louisiana (October, 1998)

"Techniques: Echocardiography"

New Orleans Cardiology Board Review

LSU School of Medicine

New Orleans, Louisiana (October, 1998)

"Coronary Artery Disease and Risk Factor Reduction"

Medical Staff Conference, Meadowcrest Hospital

Gretna, Louisiana (December, 1998)

"Fellow's Board Review – Echo Hemodynamics"

Tulane University School of Medicine, Division of Cardiology

New Orleans, Louisiana (January, 1999)

"Fellow's Board Review – Echo Diastole/Cardiomyopathy"

Tulane University School of Medicine, Division of Cardiology

New Orleans, Louisiana (February, 1999)

"Decreasing your Risk of Cardiovascular Disease"

Medical Staff Conference, West Jefferson Medical Center

Marrero, Louisiana (February, 1999)

“Fundamentals of Quantitative Doppler Techniques: Practical Applications”

“Tumors, Pseudotumors, and Clots: Importance of Adding TEE”

“Evaluation of Source of Embolism: Role of TEE”

“Tutorial: Interesting Video Case Studies”

Echo New Orleans- Course Co-Director

Tulane University School of Medicine, Division of Cardiology

New Orleans, Louisiana (April, 1999)

“Data and Opinion Relevant to the Committee’s Charge – Emphasis on Screening Methods”

Workshop – Patent Foramen Ovale: Evaluation of

Its Role as a Risk Factor for Severe Decompression

Sickness during Exposures to Reduced Atmospheric

Pressures

National Aeronautics and Space Administration

Office of Life and Microgravity Sciences and

Applications

Lyndon B. Johnson Space Center

Houston, Texas (August, 1999)

“Evaluation of Myocardial Texture”

Division of Cardiology, University of Mississippi

School of Medicine

Jackson, Mississippi (September, 1999)

“Evaluation for Screening of Embolism Including Stroke and Decompression Sickness”

Cardiology Conference, East Jefferson General Hospital

Metairie, Louisiana (October, 1999)

“Techniques: Echocardiography I & II”

New Orleans Cardiology Board Review, LSU School of Medicine

New Orleans, Louisiana (October, 1999)

“Cholesterol and Vitamins”

West Jefferson Medical Center

Marrero, Louisiana (January, 2000)

“The Clinical Significance of PFO and Importance of Determining Its Size: A Review”

Aerospace Medical Association

Houston, Texas (May, 2000)

“Heart Failure – Diagnosis and Management”

West Jefferson Medical Center

Marrero, Louisiana (September, 2000)

“Techniques: Echocardiography I & II”

Sixth New Orleans Cardiology Board Review

LSU School of Medicine
New Orleans, Louisiana (October, 2000)

“Echo Hemodynamics”
Division of Cardiology, Department of Medicine
East Tennessee State University
Johnson City, Tennessee (December, 2000)

“Analysis of Myocardial Texture”
“Interesting Echo Cases”
Division of Cardiology, University of Arizona
Tucson, Arizona (March, 2001)

“Fundamentals of Doppler Hemodynamics and Diastolic Function”
“Source of Embolism”
“Video Case Studies”
Echo New Orleans 2001, Tulane University School of Medicine
New Orleans, Louisiana (June 2001)

“Heart Failure”
3rd International Medical Update, East Tennessee State University
Johnson City, Tennessee (August 2001)

“Cardiovascular Risk Factors and New National Cholesterol Education
Program Guidelines: Impact on the Way We Practice Medicine”
Meadowcrest Hospital
Gretna, Louisiana (September 2001)

“Texture Analysis of Ultrasound Images to Detect Early
Cardiomyopathy”
Department of Agricultural and Biological Engineering
Mississippi State University, Mississippi
(September 2001)

“Reducing Risk of Cardiovascular Events”
West Jefferson Medical Center
Marrero, Louisiana (September 2001)

“Echocardiography”
Seventh New Orleans Cardiology Board Review
Louisiana State University, School of Medicine
New Orleans, Louisiana (October 2001)

“Cardiac Source of Embolism”
Cardiology Grand Rounds, LSU School of Medicine
New Orleans, Louisiana (November 2001)

“Cardiac Source of Embolism I”
Cardiology Grand Rounds, Tulane University School of Medicine
New Orleans, Louisiana (December 2001)

“Evaluation of Diastolic Function”
 “Analysis of Myocardial Texture”
 Cardiology Conference
 University of Mississippi, School of Medicine
 Jackson, Mississippi (February 2002)

“Spectrum of Echo Findings in Hypertension”
 First Annual Scientific Meeting
 Gulf Central Regional Chapter
 American Society of Hypertension
 Biloxi, Mississippi (February 2002)

“Fundamentals of Doppler Hemodynamics; Basic and Complex Equations”
 “Cardiac Masses, Missiles and Unusual Cases: Role of TTE and TEE”
 “Stroke, Atrial Fibrillation, PFO and Septal Aneurysms: Role of TTE and TEE”
 Echo New Orleans 2002
 Tulane University School of Medicine
 New Orleans, Louisiana (April 2002)

“Lipids Update”
 West Jefferson Medical Center
 Marrero, Louisiana (May 2002)

“Echocardiographic Evaluation of Prosthetic Heart Valves”
 Cardiology Grand Rounds, LSU Health Sciences Center
 New Orleans, Louisiana (March 2003)

“Prosthetic Heart Valves”
 Cardiology Conference, University of Mississippi
 Jackson, Mississippi (March 2003)

“Fundamentals of Doppler Hemodynamics; Basic and Complex Equations”
 “Cardiac Masses, Missiles and Unusual Cases: Role of TTE and TEE”
 “Stroke, Atrial Fibrillation, PFO and Septal Aneurysms: Role of TTE and TEE”
 Echo New Orleans 2003
 Tulane University School of Medicine
 New Orleans, Louisiana (April 2003)

“Update on Lipid Lowering Therapy”
 West Jefferson Medical Center
 Marrero, Louisiana (September 2003)

“Update on Lipid Lowering Therapy”
 Meadowcrest Hospital
 Gretna, Louisiana (September 2003)

“Ultrasound Imaging and Tissue Characterization of the Laboratory Animal”

Department of Physiology
School of Medicine
University of Mississippi
Jackson, Mississippi (March 2004)

“Fundamentals of Doppler Hemodynamics; Basic and Complex Equations”

“Cardiac Masses, Missiles and Unusual Cases: Role of TTE and TEE”
“Stroke, Atrial Fibrillation, PFO and Septal Aneurysms: Role of TTE and TEE”
Echo New Orleans 2004
Tulane University School of Medicine
New Orleans, Louisiana (April 2004)

“Ultrasound Imaging and Tissue Characterization of the Laboratory Animal”

Echocardiography Conference
Division of Cardiology
University of Alabama at Birmingham
Birmingham, Alabama (April 2004)

TELEVISION/RADIO:

"Christianity and Medicine"
WSHO Radio Station
Metairie, Louisiana (1990)

“High School Athletes and Echocardiography”

Ed Daniels Sports Show
WGNO Television Station
New Orleans, Louisiana (1992)

"Transesophageal Echocardiography"

Healthwatch Show
WLAE Television Station
New Orleans, Louisiana (1993)

“Decompression Illness in Divers and Astronauts”

Health Segment – WWL News
WWL Television Station
New Orleans, Louisiana (1999)

“Laps for Life” with Mark Spitz

WWL Television Station
WNOE –FM Radio Station
KUMX –FM Radio Station
New Orleans, Louisiana (July, 2000)

CLINICAL RESEARCH STUDIES

CORE LABORATORY

Heart Rate Variability Substudy (wrote software for substudy analysis)
 Cardiovascular Research Laboratory
 LSU Health Sciences Center
 New Orleans, Louisiana

OVERTURE

Omapatrilat versus Enalapril Randomized Trial of Utility in Reducing Events
 Bristol-Myers Squibb
 Heart Clinic of Louisiana
 Marrero, Louisiana (1999 -2001)

CLINICAL STUDIES

1. Co-Investigator, LIFE Trial (Losartan Intervention For Endpoint reduction in hypertension)
 LSU Medical Center, Cardiovascular Research Laboratory
 New Orleans, Louisiana (1995 -)
2. Co-Investigator, SISH (Stage I Systolic Hypertension)
 LSU Medical Center School of Medicine
 New Orleans, Louisiana (1995 -)
3. Co-Investigator, ANA-756 (A Randomized, Double-Blind, Placebo-Controlled Comparison of ANA-756 and Losartan in (Essential Hypertension)
 LSU Medical Center, Cardiovascular Research Laboratory
 New Orleans, Louisiana (1996 -)
4. Co-Investigator
 MERIT-HF (Metoprolol CR/XL Randomized Intervention Trial in Congestive Heart Failure)
 LSU Medical Center, Cardiovascular Research Laboratory
 New Orleans, Louisiana (1996 -)
5. Co-Investigator BC14809B (The Effect of Ro 40-5967 on ETT duration (6 months) and on all causes of Mortality in Comparison with Placebo in Patients with Chronic Heart Failure (NYHA Class II-IV) treated for approximately 3 years)
 LSU Medical, Center Cardiovascular Research Laboratory
 New Orleans, Louisiana (1994 -)
6. Co-Investigator, ATLAS (Assessment of Treatment with Lisinopril And Survival) LSU Medical Center Cardiovascular Research Laboratory
 New Orleans, Louisiana (1992 -)
7. Co-Investigator, ACT (Study of the Safety and the Pharmacodynamic

Effects of SR33589B Administered Orally for One Month to Patients with Left Ventricular Dysfunction)
 LSU Medical Center, Cardiovascular Research Laboratory
 New Orleans, Louisiana (1996)

8. Principal Investigator, 1518US/0006 (A Trial to Investigate the Effect of Lisinopril and Nisoldipine Combination Therapy on Heart Rate Variability in Diabetic Patients with Left Ventricular Dysfunction)
 LSU Medical Center, Cardiovascular Research Laboratory
 New Orleans, Louisiana (1996 - 1998)

9. Sub-Investigator, PURSUIT, Receptor Suppression Using Integrelin Therapy (Platelet IIb/IIIa in Unstable Angina) (1996 - 1997)

10. Principal Investigator, CV137-013 (Pilot Evaluation of the Effects of the DMP Inhibitor BMS-186716 on Functional Capacity in Subjects with Heart Failure) (1996 - 1998)

11. Principal Investigator, CV137-018 (Evaluation of the Safety/Tolerability of Long-Term Treatment with the DMP Inhibitor BMS-186716 or Lisinopril in Subjects with Heart Failure) (1996)

12. Principal Investigator, Parke-Davis #981-176/Pfizer #258/101 (A 54-Week Open Label Assessment of the Safety and Efficacy Profile of Atorvastatin as Compared to Fluvastatin, Lovastatin, Simvastatin, and Pravastatin When Used to Optimally Control Primary Hyper-cholesterolemia (Type IIA) and Mixed Dyslipidemia (Type IIB) (1997 -1999)

13. Principal Investigator, Bristol-Meyers Squibb, CV 131-061: A Multi-Center Randomized Study of Irbesartan Compared with Lisinopril in Subjects with Heart Failure. (1997 - 1999)

14. Sub-Investigator , WYETH-AYERST Research Division Conducted through Kendle International Inc., Protocol 0927B2-916, Evaluation of Duration of Treatment on Echocardiograms in Patients Treated with Anorexigens for at least three Continuous Months. (1998 -1999)

15. Principal Investigator, IMPRESS, Protocol CV137-028 Inhibition of Metalloprotease (BMS-186716) in a Randomized Exercise and Symptoms Study in Subjects with Heart Failure (1998 - 1999)

16. Principal Investigator, Treating to New Targets (TNT), Parke-Davis (1998-)

17. Principal Investigator, CV123-211 A Double-Blind Comparison of 10,20,40 and 80 mg Doses of a Modified –Release Formulation of Pravastatin, of Atorvastatin 10 mg, and of Simvastatin 20 mg with Placebo in Hypercholesterolemic Patients, Bristol-Myers Squibb (1999-)

18. Sub-Investigator, VALUE DioVan Antihypertensive Longterm Use Evaluation), Novartis (1999 -)
19. Principal Investigator, CGP 48933 Multicenter, randomized, double blind, placebo-controlled, parallel trial to assess the effect of valsartan on exercise capacity, quality of life, and signs and symptoms, in patients with stable, chronic congestive heart failure (NYHA Class II-IV). Ciba-Geigy (1999 - 2000)
20. Principal Investigator, OVERTURE Omapatrilat versus Enalapril Randomized Trial of Utility in Reducing Events, Bristol-Myers Squibb (1999 -2001)
21. Sub-Investigator, VALIANT STUDY, Novartis – A multinational, multi-center, double-blind, randomized, active controlled, parallel group study comparing the efficacy and safety of long-term treatment with Valsartan, Captopril and their combination in high-risk patients after myocardial infarction (1999 - 2002)
32. Sub-Investigator, BMS CV137-066, A Randomized, Double-Blind, Amlodipine and Losartan controlled Study of Omapatrilat in Subjects with Mild to Moderate Hypertension (1999-2000)
33. Principal Investigator, ASSENT 3 (Assessment of the Safety and Efficacy of New Thrombolytic Regimens), Boehringer Ingelheim (1999-)
34. Principal Investigator, CV123-231, A Double-Blind Comparison of 80 and 160 mg Doses of Pravastatin with Placebo in Hypercholesterolemic Subjects Bristol-Myers Squibb (2000-)
35. Sub-Investigator, ATA-201, A Multi-Center, Double-Blind Placebo Controlled Study of AT-1015 in Patients with Intermittent Claudication due to Peripheral Arterial Disease, Ajinomoto (2000-)
36. Sub-Investigator, CV 154-008, Multicenter, Randomized, Double Blind Placebo-Controlled Dose Ranging Study of the Long Term (12 Weeks) Hemodynamic Effects, Safety and Tolerability of BMS-207940, A Selective Endothelin Receptor Antagonist, in the Treatment of Heart Failure Bristol-Myers Squibb (2000)
37. Principal Investigator, 981-400-421, SAGE, A Prospective, Randomized, Double-Blind, Multi-Center Study Comparing the Effects of Aggressive Lipid-Lowering with Moderate Lipid-Lowering on the Reduction of the Total Duration of Myocardial Ischemia in the Elderly as Measured by Holter Monitoring by Comparing the Maximal Doses of Two Statins: Study Assessing Goals in the Elderly, Parke-Davis/Pfizer (2000-)
38. Principal Investigator, SCH58235, A Phase III Double-Blind Efficacy

and Safety Study of SCH 58235 (10 mg) in addition to Atorvastatin in Subjects with Coronary Heart Disease or Multiple Cardiovascular Risk Factors and With Primary Hypercholesterolemia Not Controlled by a Starting Dose (10 mg) of Atorvastatin Schering-Plough (2000-)

39. Principal Investigator, CV154-009, A Double-Blind Randomized Placebo-Controlled Study of the Efficacy and Safety of BMS-207940, A Selective Endothelin Receptor Antagonist, In Subjects with Intermittent Claudication, Bristol-Myers Squibb (2000- 2001)

40. Principal Investigator, GP00693, Phase II Double-Blind Efficacy and Safety Study of Ezetimibe (10 mg) + Atorvastatin in Subjects with CHD or Multiple Risk Factors and with Primary Hypercholesterolemia Not Controlled by a Starting Dose (10 mg) of Atorvastatin, Schering Plough Research Institute (2000-)

41. Sub Investigator, ASSENT 3, Assessment of the Safety and Efficacy of New Thrombolytic Regimens, Boehringer-Ingelheim (2000-2001)

42. Sub-Investigator, 4522IL/0065, STELLAR, A 6-Week, Open-Label, Dose-Comparison Study to Evaluate the Safety and Efficacy of Rosuvastatin vs. Atorvastatin, Cerivastatin, Pravastatin, and Simvastatin in Subjects with Hypercholesterolemia (2001-)

43. Sub-Investigator, 4522IL/0068, MERCURY II, An Open-Label, Randomized, Multi-Center, Phase IIIb, Parallel Group Switching Study to Compare the Efficacy and Safety of Lipid Lowering Agents Atorvastatin and Simvastatin with Rosuvastatin in High Risk Subjects with Type IIa and IIb Hypercholesterolemia (2001-)

38. Sub-Investigator, SYNERGY, A Prospective, Randomized, Open-Label, Multicenter Study In Patients Presenting with Acute Coronary Syndromes (ACS) (2002-)

39. Sub-Investigator, Medtronics, (WAVE) Worldwide study of Marquis VR Enhancements (2003-)

40. Sub-Investigator, Astra-Zeneca, (POLARIS) Open label randomized multicenter, Phase IIb, Parallel Group switching study to compare the efficacy and safety of lipid lowering agents Atorvastatin and Simvastatin with Rosuvastatin in high risk subjects with Type IIa and IIb Hypercholesterolemia. (2003-)

41. Principal Investigator, Atherogenics, Inc., (ARISE), A prospective randomized, double-blind multi-center study comparing the effects of AGI 1067 versus placebo on the reduction of cardiovascular events in patients with Coronary Artery Disease (2003-)

42. Sub-Investigator, Medtronic A-HIRATE: Atrial High Rate Episodes in Pacemaker Patients