### **CURRICULUM VITAE**

# John Carl Gurley, MD, FACC, FACP

### PERSONAL DATA

BIRTH DATE: November 17, 1954

BIRTH PLACE: Seattle, Washington, U.S.A.

OFFICE ADDRESS: Charles T. Wethington Bldg.

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MARITAL STATUS: Married, 3 Children

SPOUSE: Annette S. Gurley, R.N.

### PRE-MEDICAL EDUCATION

HIGH SCHOOL: Fairport Harding High School

8/1972 –6/1973 Fairport Harbor, OH

1. Bausch & Lomb Science Award

2. National Honor Society

COLLEGE: The Ohio State University

8/1973-6/1977 Columbus, Ohio (B.S. cum laude, Microbiology)

1. Phi Eta Sigma Honorary

2. Phi Kappa Phi Honorary

### **MEDICAL EDUCATION**

MEDICAL SCHOOL: The Ohio State University College of Medicine

7/1977-12/1980 Columbus, OH (M.D.)

1. Independent Study Program

RESIDENCY: Internal Medicine, Mount Carmel Medical Center,

1/1981- 6/1982 Columbus, OH

RESIDENCY: Internal Medicine, N.E. Ohio University 6/1982-6/1984 College of Medicine at Canton, OH

CHIEF RESIDENT: Internal Medicine N.E. Ohio-University College of Medicine at Canton, OH

FELLOWSHIP: Cardiology

8/1985-6/1988 University of Kentucky College of

Medicine, Lexington, KY

### **BOARD CERTIFICATION**

1. National Board of Medical Examiners #253398, 7-1-82

- 2. American Board of Internal Medicine #095545, 9-12-84
- 3. ABIM Cardiovascular Diseases #095545, 11-10-87

### PROFESSIONAL SOCIETIES

- 1. Ohio State Medical Board, 1-31-83, Registration #48492
- 2. Kentucky State Medical Board, 4-1-85, Registration #23840
- 3. DEA Registration #AG2024519

### MEDICAL LICENSURE

- 1. Ohio State Medical Board, 1-31-83, Registration #48492
- 2. Kentucky State Medical Board, 4-1-85, Registration #23840
- 3. DEA Registration #AG2024519

### **ACADEMIC APPOINTMENTS**

7/1984-6/1985	Chief Resident in Internal Medicine, Northeastern Ohio Universities College of Medicine, Canton, OH
7/1984- 6/1985	Instructor in Medicine, Northeastern Ohio Universities College of Medicine, Canton, OH
7/1984-6/1985	Attending Physician, Medical Teaching Service Aultman Hospital, Canton, OH
7/1984-6/1985	Attending Physician, Medical Teaching Service Timken Mercy Medical Center, Canton, OH
7/1985-6/1987	Fellow in Cardiology, University of Kentucky Medical Center, Lexington, KY

7/1987-6/1988 Clinical Scholar in Cardiology
University of Kentucky Medical Center, Lexington, KY (3<sup>rd</sup> year
of fellowship)

7/1988-6/1990 Assistant Professor of Medicine, Cardiology, University of
Kentucky Medical Center, Lexington, KY

7/1988.7-6/1990 Director of Coronary Care Unit, V.A. Medical Center, Lexington,
KY

7/1990-present Director of Interventional Cardiology, University of Kentucky
Medical, Lexington, KY

Associate Professor of Medicine, Cardiology, University of
Kentucky Medical Center, Lexington, KY

### **COMMITTEES**

- 1. Steering Committee, Internal Medicine Residency Program, NEOUCOM Affiliated Hospitals at Canton, Canton, OH 1984-1985
- 2. Chairman of CCU Committee, Lexington, V.A. Medical Center, Lexington, KY 1988-present
- 3. Member of Smoking Policy Task Force, University of Kentucky Medical Center, Lexington, KY 1989
- 4. Chairman of Product Evaluation Committee, University of Kentucky Medical Center, Lexington, KY 1992
- 5. Member of Search Task Force for Chairman of Cardiology, University of Kentucky Medical Center, Lexington, KY 1992
- 6. Member of Task Force on Research Incentives, University of Kentucky Medical Center, Lexington, KY 1992
- 7. Thrombolytic Therapy Committee, Lexington, V.A. Medical Center, Lexington, KY 1993
- 8. Ad Hoc Committee for Suspected MI Protocol, University of Kentucky, Lexington, KY 1994
- 9. Member of Hospital Pharmacy and Therapeutics Committee, University of Kentucky Medical Center, Lexington, KY 1995
- 10. Elected Board Member to American Heart Association (Lexington, KY Chapter) 1995

### MEDICAL STAFF APPOINTMENTS

7/1993 Staff Physician, Department of Emergency Medicine Timken Mercy Medical Center, Canton, OH 7/1984 Teaching Staff, Dept. of Medicine (with clinical privileges in the Department of Emergency Medicine), Timken Mercy Medical Center, Canton, OH 7/1985 Temporary Staff, Department of Medicine Aultman Hospital, Canton, OH Attending Physician, Department of Medicine, Division of Cardiology, 7/1987 University of Kentucky Medical Center, Lexington, KY 7/1987 Attending Physician in Cardiology, V.A. Medical Center, Lexington, KY Interventional Cardiology Section, University of Kentucky and V.A. 7/1988 Hospitals, Lexington, KY 7/1992 Medical Director of Salvation Army Homeless Clinic, Lexington, KY

### **HONORS AND AWARDS**

- 1993 Special Recognition by University of Kentucky College of Medicine Medical Students for leadership in Salvation Army Students Homeless Clinic.
- 1993 Bluegrass Health Hero by The Lane Report and Lexington Community Organizations for volunteer healthcare involvement in the community

### MANUSCRIPTS PUBLISHED

- 1. **Gurley JC**, Drug Induced Hemolytic Anemia and Renal Failure With Some Unique Laboratory Signs. Diagnostic Medicine, 1984;7(6):9-10.
- Grayburn PA, Smith MD, Gurley JC, Booth DC and DeMaria AN: Effort of Aortic Regurgitation On The Assessment of Mitral Orifice Area by Doppler Half-Time in Mitral Stenosis, AM J Cardiol, 1987;60:322-326.
- 3. **Gurley JC,** Nissen SE, Grayburn PA, Harrison MR, Booth DC, DeMaria AN: Can Cine Film be Replaced? Comparison of Digital and Film Based Angiography in the Assessment of Coronary Artery Disease. Circulation,1987; Suppl. Part; (4): IV-401,1595.
- 4. Harrison MR, **Gurley JC**, Smith MD, Grayburn PA, DeMaria AN: A Practical Doppler Echocardiography For the Assessment of Severity of Aortic Stenosis, American Heart Journal, 1988;115(3):622-628.
- 5. Grayburn PA, Smith MD, Harrison MR, Gurley JC, DeMaria AN: Pivotal

- Role of Aortic Valve Area Calculation by the Continuity Equation for Doppler Association of Aortic Stensois in Patients with Combined Aortic Stensois and Regurgitation. AM J Cardiol, 1988;61:376-381.
- 6. **Gurley JC,** Nissen SE, Booth DC, Harrison MR, Grayburn PA, Elion JL and DeMaria AN: Comparison of Simultaneously Performed Digital and Film-Based Angiography in the Assessment of Coronary Artery Disease. Circulation, 1988; 78(9):1411-1420.
- 7. Harrison MR, McPhail B, **Gurley JC**, Harlamert EA, Steinmetz JE. Smith MD, DeMaria AN: Usefulness of Color Doppler Flow Imaging to Distinguish Ventricular Septa: 1 Defect from Acute Mitral Regurgitation Complicating Acute Myocardial Infarction. AM J Cardiol, 1989;64;697-701.
- 8. **Gurley JC,** and Booth DC: Circulatory Collapse after Successful Coronary Bypass Surgery: Multivessel and Graft Spasm Reversed in the Catheterization Laboratory by Intracoronary Papaverine. AM. Heart Journal, 1990;119(5) 1194-1195.
- 9. **Gurley JC,** Nissen SE, Haynie DA. Elion JL, Booth DC and DeMaria AN: Determination of Coronary Flow Reserve by Digital Angiography: Validation of a practical Method Not Requiring Power Injection of ECG Gating. JACC, 1990; 10:190-197.
- 10. Grines CL, Nissen SE, Booth DC, Branco MC, **Gurley JC**, Bennett KA and DeMaria AN and KAMIT Study Group: A New Thrombolytic Regimen for Acute Myocardial Infarction Using Half Dose tPA with Full Dose Streptokinase, JACC, 1990;10:125-134.
- 11. Nissen SE, Grines CL, **Gurley JC**, Sublett K. Haynie D. Diaz C. Booth DC, DeMaria AN: Application of a New Phased-Array Ultrasound Imaging Catheter I in the Assessment of Vascular Dimensions. In Vivo Comparison to Cineangiography. Circulation, 1990;81(2)660-666.
- 12. DeMaria AN, Nissen SE, **Gurley JC**, Grines CL, Booth DC: Intravascular Ultrasound: Where is it Now and Where is it Going. ACC Highlights, April 1990.
- 13. Grines CL, Booth DC, **Gurley JC**, Nissen SE, Bennett KA, DeMaria AN: Acute Effects of Parenteral Beta-Blockade on Infarct and Non-infarct Zone Function After Reperfusion Therapy in Man. JACC, 1990;17:1382-1387.
- 14. **Gurley JC,** Booth DC, Hixson C, Smith MD: Removal of Retained Intracoronary PTCA Equipment by a Percutaneous Twin Guidewire Method. Cath Cardiovasc Diagn, 1990;19:251-256.

- 15. Nissen SE, **Gurley JC**, Assessment of the Functional Significance of Coronary Stenosis. Is Digital Angiography the Answer? Circulation, 1990;4:1431-1435.
- 16. **Gurley JC**, Nissen SE: Comparison of Digital and Cine Coronary Arteriography. International Journal of Cardiac Imaging, 1990;5:105-118.
- 17. Nissen SE, **Gurley JC**, Application of Indicator-Dilution Principles to Regional Assessment of Coronary Flow Reserve from Digital Angiography. In Quantitative Coronary Arteriography, Reiber JC (ed), Martinus Ninhof 1990.
- 18. Nissen SE, **Gurley JC**, DeMaria AN: Assessment of Vascular Disease by Intravascular Ultrasound. Cardiology, 1990;77:398-410.
- 19. **Gurley JC**, The Working Facts on Digital vs. Cine-For Now, We May Need Both. PTCA News, December 1990.
- 20. Grines CL. Nissen SE. Booth DC, Gurley JC, Bennett KA, O'Connor WN, DeMaria AN: Mechanism of Myocardial Infarction in Patients with Prior Coronary Artery Bypass Surgery: Therapeutic Implications: Am J Cardiol, 1990.
- 21. Nissen SE, **Gurley JC**, Intravascular Ultrasound Imaging of the Coronary Arteries. Cardiac Chronicle, 1990;4(9):1-6.
- 22. Nissen SE, **Gurley JC**, DeMaria AN: Coronary Intravascular Ultrasound New Insights Into Atherosclerotic Luminal Narrowings and Wall morphology. In Advances in Echo Contrast, 1990.
- 23. **Gurley JC**, Nissen Se: Digital Coronary Angiography: It is Ready to Replace Cine Gilm? Cardio, 1991; 8(2): 2.
- 24. **Gurley JC**, McPhail BS: Acute myocardial infarction due to thrombolytic reperfusion of chronically occluded saphenous vein coronary bypass grafts. Am J Cardiol, 1991;68:274-275.
- 25. Smith MD, Wisenbaugh T, Grayburn PA, **Gurley JC**, Spain MG, DeMaria An: Value and limitations of Doppler pressure half-time in quantifying mitral stenosis. A comparison with micromanometer catheter recordings. Am J Cardiol, 1991;2: 480-488.
- 26. Grines CL, Nissen SE, Booth DC, **Gurley JC**, Chelliah N, Wolf R, Blankenship J, Branco M. Bennett K, DeMaria AN: A Prospective Radomized Trial
- 27. Comparing Half-Dose Tissue Plasminogen Activator with Streptokinase to Full Dose Tissue Plasminogen Activator. Circulation, 1991;84:540-549.

- 28. Nissen SE, G Gurley JC, DeMaria AN: The View from Inside the Vessel. Advances in Echo Contrast, 1991;1(3):8-12.
- 29. **Gurley JC**, Nissen Se: Digital Coronary Angiography: It is Ready to Replace Cine Film? Cardio, 1991; 8(2): 2.
- 30. Nissen SE, **Gurley JC**, Application of Intravascular Ultrasound to Detection and Quantitation of Coronary Atherosclerosis Intravascular Ultrasound II (Bom N, Roelandt J. Gussenhoven WJ eds) Kluwer Academic Publishers, 1991.
- 31. Nissen SE, **Gurley JC**, Quantitative Assessment of Coronary-Dimensions, Lumen Shape and Wall Morphology by Intravascular Ultrasound (Paul Yock and Johathan Tobis eds) Churchill Livingstone Inc., 1991.
- 32. Nissen SE, **Gurley JC**, Assessment of Coronary Dimensions by Intravascular Ultrasound: Comparison to Quantitative Angiography Quantitative Coronary Angiography (Reiber JC ed) Martinus Ninjoff, 1991.
- 33. Nissen SE, **Gurley JC**, Grines CL, Booth DC, McClure RA, Berk MA, Fischer C, DeMaria AN: Intravascular Ultrasound Assessment of Lumen Size and Wall Morphology in Normal Subjects and Coronary Artery Disease Patients. Circulation, 1991;84;3:1087-1099.
- 34. Nissen SE, **Gurley JC**, Application of Intravascular Ultrasound to Detection and Quantitation of Coronary Atherosclerosis. Int Journal of Cardiac Imaging, 1991;6:165-177.
- 35. Cassidy JM, Smith MD, **Gurley JC**, Booth DC, Cater AL, Salley RK: Detection of Thrombosis of St Jude Medical Prostheses by Transesophageal Echocardiography: Report of two cases. Am Heart J, 1991;122:1466-69.
- 36. **Gurley JC**, Booth DC, Nissen SE, DeMaria AN: Influence of Operator and Patient-Dependent Variables on the Suitability of Automated Coronary Arteriography for Routine Clinical Use. J Am Coll Cardiol, 1992;19:1237-43.
- 37. Nissen SE, **Gurley JC**, DeMaria AN: Coronary Intravascular Ultrasound. Am J of Cardiology, 1992.
- 38. Nissen SE, **Gurley JC**, Booth DC, DeMaria AN: Coronary Intravascular Ultrasound: Rationale, Technology, and Initial Clinical Applications in Cardiovascular Imaging by Ultrasound, (Hanrath P, Uebis R, Krebs W eds) 1992.
- 39. **Gurley JC**, Nissen SE, Booth DC, DeMaria AN: Cine Film Replacement: Digital Cassette Tape and Image Enhancement Processing in Coronary Arteriography. JACC, 1992.

40. Xie GY, Berk MR, Smith MD, **Gurley JC**, DeMaria AN: Prognosis Value of Doppler Transmitral Flow Patterns in Patients with Congestive Heart Failure. JACC, 1994;70.

### ABSTRACTS PUBLISHED

- Nissen SE, Grayburn PA, Evans J, Elion JL, Gurley JC, and DeMaria AN: Calculation of Absolute Coronary Blood Flow From Digital Angiography: Correlation with Electromagnetic Flow. Circulation, 1986;74 (Suppl. Part 2): II-485.
- 2. Grayburn PA, Smith MD, **Gurley JC**, Kwan OL and DeMaria AN: Effect of Aortic Regurgitation on the Determination of Mitral Valve Area by Doppler Pressure Half-Time Measurements. Circulation, 1986;74 (Suppl. Part 2):II-231.
- 3. Nissen SE, **Gurley JC**, Elion JL, Grayburn PA, Booth DC, Fischer C, Berk M, Gash D, DeMaria AN: Coronary Flow Reserve by Digital Angiography: Correlation with Quantitative Angiography and Clinical Status. Circulation, 1987;76:II3-92.
- 4. Smith MD, Harrison MR, **Gurley JC**, and DeMaria AN: Accuracy of Doppler in Predicting Severity of Aortic Stenosis: A Practical Application of the Continuity Equation. JACC, 1987;9 (2 Suppl.A):21A.
- 5. **Gurley JC**, Nissen SE, Grayburn PA, Harrison MR, Booth DC and DeMaria AN: Can Cine Film be Replaced? Comparison of Digital and Film Based Angiography in the Assessment of Coronary Artery Disease. Circulation, 1987;Suppl. Part 2;76(4):IV-401-1595.
- 6. Grayburn PA, Smith MD, Harrison MR and **Gurley JC**, Doppler Assessment of Aortic Stenosis with Mixed Aortic Valve Disease: Pivotal Role of Aortic Valve Area Calculation by the Continuity Equation. Circulation, 1987;Suppl. Part 2;76(4):IV-353-1406.
- 7. Smith MD, **Gurley JC**, Spain MG and Wisenbaugh T: Accuracy of Pressure Half-Time in Quantifying Mitral Stenosis in a Clinically Relevant Range: Comparison with Micromanometer Catheter Recordings. Circulation, 1987;Suppl. Part 2;76(4):IV-354-1410.
- 8. Nissen SE, **Gurley JC**, Elion JL, Grayburn PA, Booth DC, Fischer C, Berk M, Gash D and DeMaria AN: Coronary Flow Reserve by Digital Angiography: Correlation with Quantitative Arteriography and Clinical Status. Circulation, 1987;Suppl. Part 2;76(4):IV-392-1559.

- 9. **Gurley JC**, Nissen SE, Elion JL, Grayburn PA, Fischer C, Booth DC and DeMaria AN: Comparison of Vessel Appearance Following PTCA and Coronary Flow Reserve by Digital Angiography. JACC, 1988;11(2):130A.
- 10. **Gurley JC**, Nissen SE, Elion JL, Evans J, McMinn M, DeMaria AN: Validation of a Practical Method Not Requiring Power Injection of ECG Gating. JACC, 1988;11(2):130A.
- 11. **Gurley JC**, Nissen SE, Elion JL, Evans J, McMinn M, and DeMaria AN: Determination of Coronary Flow Reserve by Digital Angiography: Validation of a Practical Method not Requiring Power Injection or ECG Gating. JACC, 1988;11(2):62A.
- 12. Smith MD, **Gurley JC**, Grayburn PA, Harlamert E and Harrison MR: Measurement of Mitral Pressure Half-Time in Patients with Curvilinear Spectral Patterns. Circulation, Nov 1988.
- 13. Nissen SE, **Gurley JC**, Grines CL, Branco M, Booth DC, and DeMaria AN: Are TIMI Grades Adequate to Characterize Reperfusion Following Thrombolysis? JACC, 1989 Suppl.
- 14. Nissen SE, **Gurley JC**, Haynie D, Sublett K, Evans J and DeMaria AN: A New Approach to In Vivo Measurement of Coronary Blood Flow Utilizing High-Speed Coronary Angiography. JACC, 1989 Suppl.
- 15. Harrison MR, Harlamert EA, **Gurley JC**, McPhail B, Smith MD and DeMaria AN: Evaluation of Ventricular Septal Defect Complicating Acute Myocardial Infarction: Identification, Localization and Differentiation from Mitral Regurgitation by Color Doppler Flow Imaging. JACC, 1989 Suppl.
- 16. Kuo CS, Constantin L, Cao LS, Grines CL, Branco MC, Booth DC, Gurley JC, and Nissen SE: The Prevalence of Late Potentials Five to Fourteen Days after Myocardial Infarction is not Reduced by Coronary Reperfusion. JACC, 1989 Suppl.
- 17. McKinney M, Booth DC, **Gurley JC**, Grines CL, Branco MC and DeMaria AN: Lack of Association Between Early Administration of Thrombolytic Therapy and the Development of Non-Q-Wave Myocardial Infarction. JACC, 1989 Suppl.
- 18. Grines CL, Nissen SE, Booth DC, Branco MC, **Gurley JC**, Bennett KA and DeMaria AN: Mechanism of Myocardial Infarction in Patients with Prior Coronary Bypass Surgery: Therapeutic Implications. JACC, 1989 Suppl.
- 19. Nissen SE, **Gurley JC**, Grines CL, Booth DC, Branco MC and DeMaria: Observer Variability in TIMI flow Grading: Comparison to a New Computer Method for Measurement of Reperfusion Kinetics. JACC, 1989 Suppl.

- 20. Grines CL, Booth DC, Gash D, **Gurley JC**, Branco MC, Nissen SE, Bennett K, DeMaria AN: Effects of Parenteral Beta Blockade on Infarct and Non-infarct Zone Function Following Successful Reperfusion in Man. Circulation, 1989 (Suppl. II-114);80(4):0457.
- 21. Salim M, Steinmetz J, Floyd RD, **Gurley JC**, Aneurysm of a Coronary Artery Bypass Graft: An Unusual Cause of Asymptomatic Mediastinal Mass. ACP presentation 1989.
- 22. Sublett K, Nissen SE, Grines CL, **Gurley JC**, Haynie D, Booth DC, DeMaria AN: Application of a New Phased-Array Ultrasonic Imaging Catheter to Assess Alterations of Vessel Anatomy Induced by Balloon Dilation. Circulation, 1989 (Suppl. II-355);80(4):1418.
- 23. **Gurley JC**, Nissen SE, Haynie D, Elion JL, Booth DC, DeMaria AN: A new Method for Measurement of Absolute Arterial Blood Flow by Digital Angiography. Circulation, 1989 (Suppl. II-413);80(4):1640.
- 24. Nissen SE, **Gurley JC**, Grines CL, Booth DC, Sublett K, Haynie D, DeMaria AN: Accuracy of a new Phased Array Ultrasonic Imaging Catheter in Measurement of Vessel Dimensions: Correlation with Cineangiography. Circulation, 1989 (Suppl. II-579;80(4):2299.
- 25. Grines CL, Nissen SE, **Gurley JC**, Diaz C, Sublett K, Booth DC, DeMaria AN: Quantitation of Concentric and Eccentric Stenoses with a new Phased Array Ultrasonic Imaging Catheter: Correlation with Angiography. Circulation, 1989 (Suppl. II-581);80(4):2306.
- 26. Nissen SE, Grines CL, Booth DC, **Gurley JC**, Diaz C, Sublett K, DeMaria AN: Measurement of Vascular Diameter with a new Phased Array Ultrasonic Imaging Catheter: Correlation with Cineangiography. 11<sup>th</sup> Congress of the European Society of Cardiology, Sept 10-14, 1989, Nice, France.
- 27. Xie G, Grines C, Nissen S, Booth D, **Gurley JC**, Branco M, Kwan O, DeMaria AN: Enhanced Ventricular Function Following Reperfusion of Myocardial Infarct by either Thrombolysis or Angioplasty: Evaluation by Serial Echo Dobbler Studies. 11<sup>th</sup> Congress of the European Society of Cardiology, Sept 10-14, 1989, Nice, France, European Heart.
- 28. **Gurley JC,** Nissen SE, Booth DC, Harrison MR, Grayburn PA, Elion JL, DeMaria AN: Can Cine Film be Replaced? A Comparison of Simultaneously Performed Digital and Film-Based Angiography in the Assessment of Coronary Artery Disease. In 3<sup>rd</sup> International Symposium on Coronary Arteriography. @1989 Hoboken Congress Organization, Erasmus University Rotterdam, The Netherlands.

- 29. Grines CL, Nissen SE, Booth DC, **Gurley JC**, Celliah N, Blankenship J, Branco MC, Bennett K, DeMaria AN: A Prospective, Randomized Trial Comparing Half Dose tPA with Streptokinase to Full Dose tPA in Acute Myocardial Infarction. JACC, 1990;15(2):4A.
- 30. **Gurley JC**, Nissen SE, Booth DC, Grines CL, Grigsby G, DeMaria AN: Evaluation of Peripheral Vascular Diameter and Cross-Sectional Area with a Multi-Element Intravascular Ultrasound Catheter: Comparison to Quantitative Cineangiography. JACC, 1990;15(2):29A.
- 31. Nissen SE, **Gurley JC**, Booth DC, Grines CL, Grigsby G, DeMaria AN: In Vivo Assessment of Human Coronary Minimum Lumen Diameter with a Multi-Element Intravascular Ultrasound Catheter: Comparison to Quantitative Cineangiography. JACC, 1990;15(2):29A.
- 32. **Gurley JC**, Nissen SE, Haynie D, Elion JL, Booth DC, DeMaria AN: Does Computer-Based Edge Enhancement Alter the Interpretation of Digital Coronary Arteriograms? JACC, 1990;15(2):82A
- 33. **Gurley JC**, Nissen SE, Booth DC, Grines CL, Blake J, Harrison MR, DeMaria AN: Cine Film Replacement: Application of Real-Time Digital Cassette Tape to Coronary Arteriography. JACC, 1990;15(2):83A.
- 34. **Gurley JC**, Nissen SE, Haynie D, Sublett K, Booth DC, DeMaria AN: Is Routine Automated Quantitative Coronary Arteriography Feasible? Evaluation of Operator-Dependent Variables Inherent to the Technique. JACC, 1990;15(2):115A.
- 35. Booth DC, McKinney M, **Gurley JC**, Grines CL, Nissen SE, DeMaria AN: Spontaneous Regession of Infarct Stenosis after Thrombolysis for Acute Myocardial Infarction is Associated with Enhanced Improvement in Left Ventricular Wall Motion. JACC, 1990;15(2):217A.
- 36. **Gurley JC**, Nissen Se, Booth DC, Grines CL, Harrison MR, DeMaria AN: Filmless Coronary Arteriography: Diagnostic Equivalence of Digital and Cine Imaging. Submitted to the 12<sup>th</sup> Congress of the European Society of Cardiology, September 16-20, 1990 Stockholm, Sweden Can Cine Film be Replaced? A Comparison of Simultaneously Performed Digital and Film-Based Angiography in the Assessment of Coronary Artery Disease.
- 37. Grines CL, Nissen SE, Booth DC, Branco MC, **Gurley JC**, Bennett K, DeMaria AN: Mechanism of Myocardial Infarction in Patients with Prior Coronary Bypass Surgery. Therapy Implications. JACC, 1990;13:93A.

- 38. Grines CL, Nissen SE, Booth DC, **Gurley JC**, Chelliah N, Blankenship J, Branco MC, Bennett K, DeMaria AN. A Prospective Randomized Trial Comparing Combination Half-Dose tPA with Streptokinase to Full-Dose tPA in Acute Myocardial Infarction: Preliminary Report. JACC, 1990;15(2):4A36.
- 39. Nissen SE, **Gurley JC**, Grines CL, Booth DC, Fischer C, DeMaria AN: Coronary Atherosclerosis is Frequently Present at Angiographically Normal Sites: Evidence from Intravascular Ultrasound in Man. Circulation, 1990;82;4:III-45938.
- 40. **Gurley JC**, Nissen SE, Grines CL, Booth DC, Fischer C, DeMaria AN: Comparison of Intravascular Ultrasound and Angiography Following Percutaneous Transluminal Angioplasty. Circulation, 1990;82;4:III-7238.
- 41. Nissen SE, **Gurley JC**, Grines CL, Booth DC, Fischer C, DeMaria AN: Comparison of Intravascular Ultrasound and Angiography in Quantitation of Coronary Stenoses and Dimensions in Man: Impact of Lumen Eccentricity. Circulation 1990;2;4:III-44038.
- 42. Nissen SE, **Gurley JC**, Booth DC, McClure RR, Berk MR, DeMaria AN: Spectrum of Intravascular Ultrasound Findings in Atherosclerosis: Wall Morphology and Lumen Shape in CAD Patients. JACC, 1990;17(2):93A.
- 43. Lenhoff SJ, MacPhail BS, Smith MD, Kwan OL, Booth DC, **Gurley JC**, DeMaria AN: Value and Limitations of Biplane Transesophageal Echo in the Estimation of Left Ventricular Volumes and Ejection Fraction. JACC, 1991;17(2):35A.
- 44. **Gurley JC**, Nissen SE, Booth DC, Diaz C, Fischer C, O'Connor WN, DeMaria AN: Is the Tri-Layer Arterial Appearance an Artifact? Differences Between In Vivo and In Vitro Intravascular Ultrasound. JACC, 1991;17(2):112A.
- 45. **Gurley JC**, Nissen SE, Booth DC, Fischer C, DeMaria AN: Reduction in Global and Regional Coronary Vasomotion: A Descriptor of Atherosclerosis by Intravascular Ultrasound. JACC, 1991;17(2):234A.
- 46. Booth DC, McKinney ME, **Gurley JC**, Nissen SE, Grines CL, DeMaria AN: Reperfusion Therapy Improves Infarct Zone Wall Motion in Inferior as Well as Anterior MI. JACC, 1991;17(2):255A.
- 47. Booth DC, Nissen SE, **Gurley JC**, Bates M, McDonnel A, and Eberle M: Design, Development and Initial Human Testing of an Ultra-Low Profile 3.5Fr (1.16mm) Coronary Intravascular Ultrasound Device. Circulation, 1991;84(4):II-154.

- 48. Nissen SE, Booth DC, **Gurley JC**, Bates M, Yamagishi M, Fischer C, DeMaria AN: Coronary Remodeling in CAD: Intravascular Ultrasound Evidence of Vessel Expansion. Circulation, 1991;84(4):II-437.
- 49. Nissen SE, **Gurley JC**, Booth DC, Berk MR, Yamagishi M, Fischer C, DeMaria AN: Differences in Intravascular Ultrasound Plaque Morphology in Stable and Unstable Patients. Circulation, 1991;84(4):II-436.
- 50. Nissen SE, Yamagishi M, Booth DC, **Gurley JC**, Berk MR, Bates M, Fausch M, Grigsby G, DeMaria AN: Coronary Intimal Thickness Increases with Age: Evidence from Intravascular Ultrasound in Normal and CAD Patients. J Am Coll Cardiol, 1992;19(3):140A.
- 51. Nissen SE, **Gurley JC**, Booth DC, Yamagishi M, Berk MR, Fausch M, Bates M, Grigsby G, DeMaria AN: Mechanisms for False Negative Coronary Angiography: Insights from Intravascular Ultrasound Imaging. J Am Coll Cardiol, 1992;19(3):140A.
- 52. Yamagishi M, Nissen SE, Booth DC, **Gurley JC**, Fischer C, DeMaria AN: Impaired Nitroglycerin Induced Vasodilation in Coronary Atherosclerosis: Evidence from Intravascular Ultrasound. J Am Coll Cardiol, 1992;19(3):
- 53. Yamagishi M, Nissen SE, Booth DC, **Gurley JC**, Fischer C, DeMaria AN: Mechanism of NTG-Induced Vasodilation of Coronary Stenoses: Expansion of the Non-Involved Vessel Wall. J Am Coll Cardiol, 1992;19(3):211A.
- 54. **Gurley JC**, Bates MC, Grigsby G, Morris EJ, Booth DC: Acute Myocardial Infarction Due to Thrombolytic Reperfusion of Chronically Occluded Vein Grafts. Circulation, 1992 (Suppl.) 86;4:I-650, 2586.

### **BOOK CHAPTERS**

- "Application of indicator dilution principles to regional assessment of coronary flow reserve from digital angiography" by Steven E. Nissen and **Gurley JC.**
- "Quantitative Coronary Arteriography," 1991, Vol. 117, Edited by Johan H.C. Reiber and Patrick W. Serruys
- "Intravascular ultrasound imaging following mechanical coronary interventions: theoretic advantages and initial clinical experience," by Steven E. Nissen and **Gurley JC.**
- "Restenosis after Intervention with New Mechanical Devices," 1992, Vol. 131, Edited by Patrick Serruys, Bradley Strauss and Spencer King, III.

"Quantitative Assessment of Coronary Dimensions, Lumen Shape, and Wall Morphology by Intravascular Ultrasound" by Steven E. Nissen and **Gurley JC** 

"Intravascular Ultrasound Imaging," 1992, Edited by Jonathan Tobis and Paul Yock.

"Development and Application of Coronary Intravascular Ultrasound:" Comparison to Quantitative Angiography" by Steven E. Nissen and **Gurley JC** 

"Advances in Quantitative Coronary Arteriography," 1993, Vol. 137, Edited by Johan Reiber and Patrick Serruys.

#### SERVICE TO EDITORIAL BOARDS

- 1. Circulation (manuscript reviewer)
- 2. JACC: (Abstract Grader, American College of Cardiology Scientific Sessions, 1989, 1990, 1991).
- 3. American Journal of Cardiology (manuscript reviewer)\
- 4. Catheterization and Cardiovascular Diagnosis (manuscript reviewer)

## INVITED LECTURES (NATIONAL & INTERNATIONAL)

- 1. How to Apply digital Subtraction Angiography to Clinical Procedures" AHA 62<sup>nd</sup> Scientific Sessions, New Orleans, November 1989. "How-To Session."
- 2. ACC Mini Course: How to Configure a Catheterization Laboratory in 1990—Comparison of Digital and Cine Coronary Arteriography. 39<sup>th</sup> Annual Scientific Sessions of the American College of Cardiology, New Orleans, Louisiana.
- 3. Coronary Intravascular Ultrasound. Third International Symposium of Interventional Radiology and New Vascular Imaging, May 1990, Nara, Japan.
- 4. Participant in Cardiac Imaging: X-ray, MR and Ultrasound, NYCOMED Scientific Symposium, Bergen Norway, October 1990.
- 5. Cine Film Replacement. European Cardiology Working Group on Coronary Arteriography, Kiel, West Germany, June 1990.
- 6. "Meet the Experts" at ACC 40<sup>th</sup> Scientific Session, Atlanta, March 1991. How to Use Digital Angiography in Clinical Practice.

- 7. "Meet the Experts" at ACC 40<sup>th</sup> Scientific Session, Atlanta, March 1991. Quantitation of Coronary Artery Disease.
- 8. Session co-chairman for abstract presentations at ACC 40<sup>th</sup> Scientific Session, Atlanta, March 1991. Atherectomy, Lasers and Balloon Angioplasty: Reports from Large Clinical Trials.
- 9. "Coronary angiography: digital image acquisition, storage and communication." Workshop on integrated image systems in cardiology. At: Johannes Gutenberg University, Mainz, Germany. April 1992.
- 10. "Congestive Heart Failure," Cardiology Grand Rounds, Lexington, KY 1992.
- 11. "Silent Myocardial Ischemic," Geriatrics Rehab Issues, Lexington, KY 1992.
- 12. "New Cath Lab Techniques for Assessing Coronary Artery Disease," Grand Rounds, University of Louisville, Louisville, KY 1993.
- 13. How-To Session on "How to Assess the Significance of Coronary Stenosis," AHA 42<sup>nd</sup> Scientific Session, Atlanta, GA 1993.
- 14. "A Practical Guide for Nurses to Thrombolysis in the Management of Acute Myocardial Infarction," Critical Care/Trauma Symposium, Lexington, KY 1993.
- 15. "Cardiogenic Shock," University of Kentucky College of Medicine Residents, Lexington, KY 1993.
- 16. Clinical Workshop in Cardiology, Medical/Surgical Care Course, University of Kentucky College of Medicine, Lexington, KY 1993.
- 17. "A Practical Guide to Thrombolysis in the Management of Acute Myocardial Infarction": Family Medicine Primary Care Review, Lexington, KY 1994.
- 18. "How and When to Refer Patients for Cardiac Interventions": Family Medicine Primary Care Review, Lexington, KY 1995.
- 19. Cardiac Resynchronization for the Physician Update Course, January 10-11, 2002, Atlanta, Georgia Medtronic.
- 20. Cardiac Resynchronization Update, January 11-13, 2002, Key Biscayne, Florida Medtronic.
- 21. Heart Failure & Arrhythmia Management Update, April 4-6, 2002, Robinsville, Missouri Medtronic.

- 22. Cardiac Resynchronization Therapy Physician Program June 20, 2002, Dallas, Texas Guidant.
- 23. How to shorten left Heart Lead Implant Times and Increase Implant Success, June 14-15, 2002, New York Medtronic.
- 24. Presentation on "Heart Failure," July 25-26, 2002, Knoxville, Tennessee Medtronic.
- 25. "Learn from the Experts How to Shorten Implant Lead Times and Increase Implant Success," October 12, 2002, New York Medtronic
- 26. Advances in Cardiac Monitoring and Resynchronization, November 11-12, 2002, Minneapolis, Minnesota Medtronic.
- 27. Presentation December 4-6, 2002, Tulsa, Oklahoma Medtronic.
- 28. "Reverse Remodeling for Nurse Practitioner," February 21-22, 2003, Atlanta, Georgia Medtronic.
- 29. "CS Cannulation/Anatomy and LV Lead Implantation," March 17, 2003, Minneapolis, Minnesota Medtronic.
- 30. "Heart Failure and Arrhythmia Management Update" April 5, 2003, Tunica, Missouri Medtronic.
- 31. "Cardiac Resynchronization Therapy for Heart Failure Patients and Successful Implant Techniques," April 23-25, 2003, Albuquerque, New Mexico Medtronic.
- 32. (Acunav/Siemens) Intracardiac Ultrasound Training, March 12-14, 2004 San Francisco, California Medtronic.
- 33. Presentation, "How to Place & Stabilize the LV Leads in a Cardiac Vein," May 30, June 1 2004, San Francisco, California Medtronic.
- 34. Presentation June 4-5, 2004 San Antonio, Texas Medtronic.
- 35. Presentation, "CRT Case Japan Scholars," June 30 July 1, 2004 Minneapolis, Minnesota Medtronic.
- 36. Presentation "Virtual Cath Lab," November 17, 2004, Atlanta, GA.
- 37. Presentation "Catheter Based Management of Valvular Heart Disease," 10<sup>th</sup> Annual Cardiovascular Symposium, October 1, 2004 Central Baptist Hospital. Lexington, KY.

- 38. "Cardioneurology A New Interventional Specialty?", Cardiology Grand Rounds, April 8, 2005, Lexington, KY.
- 39. Presentation "Update on Interventional Cardiology," Saint Joseph Hospital, Cutting Edge Heart Failure Care 2005, June 3, 2005, Lexington, KY.
- 40. Presentation "Cardio Neurology? A New Interventional Specialty? Frankfort Regional Medical Center, June 9, 2005, Frankfort, KY.
- 41. Presentation "Intracardiac Devices for PFO and AF," Research Day, Marriott, October 7, 2005, Lexington, KY.
- 42. Presentation "Cutting Edge Interventional Technology." American Heart Association, March 1, 2006, Louisville, KY.

### **GRANTS OR CONTRACTS**

- 1. Double-Blind Evaluation of Transdermal Nitroglycerin Delivery System in Doses Ranging From 15 mg/24 hrs to 105mg/24 hrs vs. Placebo in the Treatment of Angina Pectoris. Sponsor: Ciba Geigy Pharmaceuticals. PI: Anthony DeMaria, MD.
- 2. The Effect of Immediate PTCA Following Thrombolysis on the Recovery of Myocardial Function and Incidence of Reocclusion in Partially Reperfused Patients. PI: Marcelo Branco, MD.
- 3. A Multicenter, Randomized Trial of Three Thrombolytic Regimens in Acute Myocardial Infarction Sponsor: Hoerst Roussel Pharmaceuticals. PI: Cindy Grines, MD.
- 4. The Effect of Intravenous Metoprolol on Regional and Global Left Ventricular Function During Acute Myocardial Infarction. PI: Cindy Grines, MD.
- 5. An Open Study of the Safety and Efficacy of BW tPA in Patients with Acute Myocardial Infarction. Sponsor: Burroughs Wellcome Company. PI: Cindy Grines, MD.
- 6. Coronary Sinus Retroperfusion During PTCA. Sponsor: Retroperfusion Systems, Inc. PI: David C. Booth, MD.
- 7. Prognostic Value of Late Potentials. Kentucky Affiliate AHA Research Fellowship Award, 1987. Sponsor: Shien-Suu Kuo, MD.

- 8. Principal Investigator in: Value and Limitations of Digital Angiography in the Evaluation of Coronary Artery Disease. AHA Kentucky Affiliate, Affiliate Grant in Aid for \$17,200, 1989-1990.
- 9. Coronary Artery Dynamics in Patients with Chest Pain Syndrome and Normal Coronary Arteries. PI: David C. Booth, MD, University of Kentucky.
- 10. TAMI-6 co-investigator. A pilot Trial of Late Thrombolysis and Delayed Revascularization in Myocardial Infarction.
- 11. A Randomized, Double-Blind, Multicenter Study Comparing Myocardial Function, Patency, and Safety of Intravenous Eminase @ (APSAC, Anistreplase) versus tPA (Alteplase, Activase @) in Patients with Acute MI FIB03. Sponsored by Beecham Laboratories, Bristol, Tennessee, 1989-1990.
- 12. Measurement of Absolute Coronary Blood Flow by Digital Angiography. Affiliate Grant-in-Aid, AHA Kentucky, Submitted 11-01-89.
- 13. Co-Investigator in MARCATOR (Multicenter American Research trial with Cilazopril after Angioplasty to prevent Transluminal coronary Obstruction and Restenosis), 1990.
- 14. Participant in ACME VA Cooperative Study 1990.
- 15. Principal Investigator in: Measurement of Absol; Acute Coronary blood Flow by digital Coronary Angiography. AHA Kentucky Affiliate, Affiliate Grant in Aid for \$15,873, 1990-1991.
- 16. Organized 1990 University of Kentucky Training Course in Catheterization Laboratory and Clinical Cardiac Imaging for General Electric Company.
- 17. Principal Investigator in: An optional open label, long term study of ht effect of Flosequinan 50 mg BID (75 mg/25 mg BID up or down titration) on safety, tolerance, survival time, and disease symptomatology in congestive heart failure patients randomized to the BPI925 double blind study. 1989-Present.
- 18. Principal Investigator in: An optional, open long term study of the effect of Flosequinan 50 mg BID (75 mg/25 mg BID up or down titration) on safety, tolerance, survival time, and disease symptomatology in congestive heart failure patients randomized to the BPI925 double blind study. 1990-Present.
- 19. Principal Investigator in: Parallel evaluation of the hemodynamic effects of 1.0 mg, 20 mg, and 40 mg of Fosinopril in patients with chronic heart failure. 1991.

- 20. Principal Investigator in: Two-year open label Fosinopril versus Enalapril therapy. 1991.
- 21. Co-investigator in: PROFILE (<u>Prospecive RandOmized FlosequInan Longevity Evaluation</u>). A double-blind, randomized, placebo-controlled study of the effects of Flosequinan on the survival of patients with chronic congestive heart failure. 1991.
- 22. Principal Investigator in: Multicenter, double-blind, randomized, parallel, multiple-dose, placebo-controlled study of the hemogynamic and clinical effects of Losartan, (DUP 753 MK-954) in patients with heart failure. 1991.
- 23. Principal Investigator in: Effects of Amlodipine on exercise tolerance and safety in patients with chronic, symptomatic (NYHA Class II-IV) heart failure receiving a combination of Angiotensin converting enzyme inhibitors, Digoxin and diuretics. 1991.
- 24. Principal Investigator in: A Phase III Multicenter study of the comparative efficacy and safety of IV Milrinone and Dobutamine on left ventricular dysfunction in CHF following a MI. 1989-1991.
- 25. Principal Investigator in: An Open-Label, Compassionate Use Study of Chronic Oral Therapy with Manoplax (Flosequinan 999) in Patients with Congestive Heart Failure. 1991.
- 26. Principal Investigator in: Extension Phase of a Multicenter, Double-Blind, Randomized, Parallel, Multi Dose Placebo-Controlled Study of the Hemodynamic and Clinical Effects of Losartan (MK-954, DuP-753 in Patients with Heart Failure. 1991.
- 27. Principal Investigator in: A Multicenter, Open-Label, Ascending dose, Safety and Tolerability Trial to Compare the Effects o fCGP-39393 and Heparin When Given in Conjunction with Streptokinase to Patients with Acute Transmural Myocardial Infarction. 1992.
- 28. Principal Investigator in: CAPRIE (<u>C</u>lopidogrel versus <u>A</u>spirin in <u>P</u>atients at <u>R</u>isk of <u>I</u>schemic <u>E</u>vents. 1993.
- 29. Principal Investigator in: An Open-Label, Long term study of the Effects of Manoplax (Flosequinan) 50 mg BID on Safety, Tolerability, Survival time, and Disease Symptomatology in Congestive Heart Failure Patients who have participated in BPI-932. 1993.
- 30. Principal Investigator in: SciMed DOMINO PTCA Catheter Clinical Investigation Sponsored by SciMed. \$3,600.

- 31. Principal Investigator in: A Multicenter, Double-blind, Randomized Study of Compare the Safety and Efficacy of GB-8967 with Heparin in Patients Undergoing Percutaneous Transluminal Coronary Angioplasty (PTCA). 1994. Sponsored by Biogen, Inc. \$37,500.
- 32. Principal Investigator in: Thrombolysis and Thrombin Inhibition in Myocardial Infarctions (TIMI) 9B Trial. 1994. Sponsored by Ciba-Geigy.
- 33. Principal Investigator in: The First American Study of Infarct Survival (AISS). October, 1995. Sponsored by Brigham and Young Hospital and Harvard University (Study Cancelled, 1996).
- 34. Principal Investigator in: A Phase II, Multicenter, Randomized, Double Blind, aspirin-controlled study to evaluate pharmacokinetics, pharmacodynamics, and tolerability of Ro-48-3657, an oral platelet GP IIB/3A Antagonist, in subjects post an acute coronary syndrome. Protocol WO684g. (TIMI 12). Sponsored by Genentech, Inc.
- 35. Principal Investigator in: A Randomized, Double-blind Evaluation of the Efficacy and Safety of Two Dosing Regimens of Integrelin vs Placebo for Reducing Mortality and Myocardial (RE) infarction in Patients with Unstable Angina or Non-Q wave Myocardial Infarction. Sponsored by COR Therapeutics, Inc. (PURSUIT).
- 36. Principal Investigator in: a Phase II, Randomized, Open-Label Parallel Group, Multicenter, International Trial of the Safety of TNK-tPA in Acute Myocardial Infarction (Assessment of the Safety of a New Thrombolytic: TNK-tPA [ASSENT] Sponsored by Genetech, Inc.
- 37. Principal Investigator in: HOE 642A/2007 Safety and tolerability of multiple Doses of HOE642A Given as an Intravenous Infusion to Patients with Unstable Angina Pectoris Sponsored by Hoechst Marion Roussel, Inc. (Quintiles).
- 38. Principal Investigator in: GUARDIAN GUARD **D**uring **I**schemia **A**gainst **N**ecrosis HOE-642. 1997.
- 39. Site Principal Investigator in: "Sudden Cardiac Death in Heart Failure Trial (SCD-HeFT)", NHLBI, 1997., \$120,000.
- 40. Site Principal Investigator in: "A Phase III, Open-Label, Active Controlled, Randomized, Multicenter Study of Expanded Utilization of Intravenous Beta-Blocker Therapy in Acute Ischemic Syndromes: The Esmolol Myocardial Ischemia Trial (EMIT)", Ohmeda, Inc., 1997, \$3,500.

- 41. Site Principal Investigator in: "A Phase III, Multicenter, International, Randomized, Double-Blind, Aspirin-Controlled, Study to Evaluate the Efficacy and Safety of Sibrafiban (Ro 48-3657), an Oral Platelet Glycoprotein IIb/IIIa Antagonist, as Therapy for the Prevention of Secondary Vascular Events in Patients After Acute Coronary Syndrome". The SYMPHONY Trial," Hoffmann-LaRoche, Inc., 1998, \$75,000.
- 42. Principal Investigator in: "The 2<sup>nd</sup> Symphony Trial. A Phase III, Multicenter, International, Randomized, Double-Blind, Aspirin-Controlled Trial to Evaluate the Efficacy and Safety of Two Regimens with Xubix™ (sibrafiban; Ro 48-3657), an Oral Platelet Glycoprotein IIb/IIIa Receptor Antagonist, as Therapy for the Long Term\_ Prevention of Secondary Vascular Events in Patients After an Acute Coronary", Hoffmann-LaRoche, Inc., 1998, \$75,000.
- 43. Co-Investigator: "Evaluation Study of Congestive Heart Failure and Pulmonary Artery Catheterization Effectiveness (ESCAPE)", NIH, 2000, \$80,795.10.
- 44. Site Principal Investigator: A Double-Blind, Parallel Group, Dose Response, Multi-Center Study of the Safety and Efficacy of Diltiazem HCL Extended Release Capsules (G99) Compared to Placebo Dosed at Bedtime and to G99 Dosed in the Morning, in the Treatment of Chronic, Stable, Exercise-Induced Angina", Biovail/Integrated Research, 2000.
- 45. Site Co-Principal Investigator: "Randomized Evaluation of Recurrent Stroke comparing PFO Closure to Established Current Standard of Care Treatment (RESPECT)", AGA Medical Corporation, 2003, \$250,000.
- 46. Principal Investigator: Amplatzer PFO Occluder Humanitarian Use Device, AGA Medical Corporation, 2003, \$0.
- 47. WATCHMAN® PROTECT AF Clinical Study (WATCHMAN Left Atrial Appendage System for Embolic <u>PROTECT</u>ion in Patients with <u>Atrial Fibrillation clinical study</u>), 2004.
- 48. Migraine Headache Clinical Research Study to check for the presence of Patent Foramen Ovale (PFO) in patients with Migrane Headaches, 2005.