

CURRICULUM VITAE — Lair Geraldo Theodoro Ribeiro, M. D., F.A.C.C.

EDUCATION

	Degree	Year
Educational Foundation Machado Sobrinho, Juiz de Fora (MG), Brazil	B.S.	1967
Medical School of the Federal University Juiz de Fora (MG), Brazil	M.D.	1972

INTERNSHIP AND POSTGRADUATE TRAINING

Residency in Cardiology, Pontificia Universidade Catolica of Rio de Janeiro (RJ), Brazil		1973
Research Fellow in Medicine, Peter Bent Brigham Hospital and Harvard Medical School, Boston (MA), USA		1976-1978
Fellow in Cardiology, The Methodist Hospital Baylor College of Medicine, Houston (TX), USA		1978-1980

TEACHING/RESEARCH/MANAGERIAL EXPERIENCE

Teaching Assistant in Anatomy, Medical School of the Federal University of Juiz de Fora (MG), Brazil		1969-1971
Teaching Assistant in Cardiology, Medical School of the Federal University of Juiz de Fora (MG), Brazil		1971-1972
Instructor in Cardiology, Post-Graduate Course, Pontificia Universidade Catolica of Rio de Janeiro (RJ), Brazil		1974
Assistant of Professor in Cardiology, Medical School of Barbacena (MG), Brazil		1975-1976
Assistant Director of Deborah Cardiovascular Research Institute, Browns Mills (NJ), USA		1980-1982
Adjunct Assistant Professor Thomas Jefferson College Of Medicine Philadelphia (PA), USA.		1981-1984
Director, Clinical Research Merck Sharp & Dohme Research Laboratories, West Point (PA), USA.		1982-1985
Adjunct Associate Professor Thomas Jefferson College of Medicine Philadelphia (PA), USA.		Since 1984
Executive Director, Cardiovascular Clinical Research, CIBA-GEIGY Corporation		1985-1988

Pharmaceutical Division, Summit (NJ), USA.

Acting Vice President, Cardiovascular Drug Development, CIBA-GEIGY Corporation
Pharmaceutical Division, Summit (NJ), USA. Sept. 1988-
Jan. 1989

Chairman of Transderm-Nitro Defense
CIBA-GEIGY Corporation
Pharmaceutical Division, Summit (NJ), USA. Sept. 1988-
Jan. 1989

EXTRACURRICULUM EDUCATION

NLP Practioner Certification, New York NLP Institute, New York (NY), USA. 1985-1986

Management Development Program, Northeastern University, Boston (MA), USA. 1987

NLP MasterCertification, NLP Comprehensive, Boulder, (CO), USA. 1990

MEDICAL PUBLICATIONS

(See attached list)

OTHER AFFILIATIONS

Brazilian Cardiology Society 1974
American Federation of Clinical Research 1980
New York Academy of Science 1981
American College of Cardiology 1983
Who's Who in Frontier Science Technology 1983
American Hear Association's Councils of
Circulation and Basic Science 1985
National Association of Neuro-Linguistic Programming 1986

SERVICE EXPERIENCE - Brazil

Banco do Brasil Employee - Teófilo Ottoni (MG) 1964-1966
Cardiologist, Pro-Cardiaco Hospital 1972-1974
Cardiologist, Saint Luke Hospital - Teófilo Ottoni (MG) 1974-1976

PRESENT POSITION

President, International Support, Inc.
Scientific and Management Consultants
Watchung (NJ) Since Feb.
1989

PUBLICATIONS

MANUSCRIPTS PUBLISHED

1. Chiariello M, Ribeiro LGT, Davis MA and Maroko PR. "Reverse Coronary Steal" Induced by methoxamine following coronary artery occlusion in dogs. *Circulation* 56:809-815, 1977.
2. Ribeiro LGT, Hillis LD, Louie Eric K, Davis MA, Maroko PR and Braunwald E. A method for demonstrating the efficacy of intervention designed to limit infarct size following coronary occlusion *Cardiovasc Res* 12:334-340, 1978.
3. Maroko PR, Kloner RA, Yasuda T, Ribeiro LGT, Maclean D and Braunwald E. Recent Investigations on attempts to limit infarct size. Chapter in acute and long term medical management of myocardial ischemia. L. Wilhelmsen and S. Hjalmarson, editors, Lindgren and Soner, Molndal. 373-387, 1978.
4. Braunwald E, Kloner RA, Hillis LD, Maclean D, Ribeiro LGT and Maroko PR: The use of hyaluronidase in the limitation of infarct size following acute coronary occlusion. Chapter in acute and long term medical management of myocardial ischemia. L Wilhelmsen and A Hjalmarson, Editors, Lingren and Soner, Molndal 358-372, 1978.
5. Ribeiro LGT, Louie EK, Hillis LD, Davis MA and Maroko PR. Early augmentation of R wave voltage after coronary artery occlusion. A useful index of myocardial injury. *J Electrocardiol* 12:89-95, 1979.
6. Ribeiro LGT, Louie EK, Davis MA and Maroko PR: Augmentation of collateral blood flow to the ischemic myocardium by oxygen inhalation following experimental coronary artery occlusion *Cardiovasc Res* 13:160-166, 1979
7. Maroko PR, Maclean D, Ribeiro LGT and Braunwald E. Pharmacological limitation of infarct size. Enzymatic electrocardiographic and morphological studies in the experimental animal and man. *Enzymes in Cardiology. Diagnosis & Research* Editor, DJ Hearse, The John Wiley Publishing Co, 1979.
8. Ribeiro LGT, Hooking G, Brandon TA, Reduto LA and Miller RR: Hyperemia bordering ischemic myocardium in experimental myocardial infarction. *Cardiovasc Res* 14:345-351, 1980.
9. Quinones MA, Young JB, Waggoner AD, Ostojic MC, Ribeiro LGT and Miller RR: Pulsed doppler echocardiography: An accurate noninvasive detector of left-sided valvular insufficiency. *Br Heart J* 44:612-620, 1980.
10. Ribeiro LGT, DeBauche TL, Brandon TA, Reduto LA, Maroko PR and Miller RR Comparative effects of verapamil and nifedipine on reactive hyperemia, and ventricular arrhythmias during coronary artery reperfusion. *Eur Heart J (Suppl B):* 31-35, 1980.
11. Ribeiro LGT and Yasuda T. Coronary reperfusion in rats - Beneficial effects of verapamil. *Arq Bras Cardiol* 35:135-138, 1980.
12. Ribeiro LGT, Brandon TA, Hopkins G, Reduto L.A, Taylor A and Miller RR. Protacyclin in experimental myocardial ischemia. Effects on hemodynamic regional myocardial blood flow, infarct size and mortality. *Am J Cardiol* 47:835-840, 1981.

13. Young JB, Quinones MD, Waggoner AD, Ostojic MC, Ribeiro LGT and Miller RR: Pulsed doppler echocardiographic assessment of left-sided valvular insufficiency
Noninvasive cardiovascular diagnosis Editor, EB Diethrich, The PSG
Publishing Company, Inc. 575-584, 1981.
14. Ribeiro LGT, Brandon TA, DeBauche TL, Maroko PR and Miller RR: Antiarrhythmic and hemodynamic effects of calcium channel blocking agents during coronary arterial reperfusion. *Am J Cardiol* 48:69-74, 1981.
15. Ribeiro LGT and Maroko PR. Reduction in infarct size by verapamil administration
Arq Bras Cardiol 36:1-4, 1981.
16. Maroko PR, Chiariello M and Ribeiro LGT. The influence of vasodilators and vasoconstrictors on coronary collateral flow after experimental coronary artery occlusion. *Les Alpha-Bloquants. Pharmacologie Experimentale Et Clinique*, Baumann, D, et al, Editors. Paris Symposium International, Masson Publishing Company, 193-202, 1981.
17. Iwaski T, Ribeiro LGT, Faria DB, Cheung W-m and Maroko PR: The importance of the source of hyaluronidase in determining its effectiveness in reducing infarct size
Am Heart J 102 324-329, 1981.
18. Yasuda T, Holmarl BL, Ribeiro LGT, Alpert JS and Maroko PR. Accuracy of serial 12 lead electrocardiograms in localizing myocardial infarctions. *J Electrocardiol* 15(2):181-188, 1982.
19. Miller RR, Ribeiro LGT, DeBauche TL and Brandon TA: Effects of prostacyclin and nitroprusside on mortality following experimental coronary artery occlusion, Chapter 13, *Platelets and Prostaglandins in Cardiovascular Disease*, Metha, J and Metha, P, Editors Mount Kisco, NY, Futura Publishing Company, 251-264. 1981.
20. Quinones MA, Waggoner AD, Reduto LA, Nelson JG, Young JB, Winters WL, Jr, Ribeiro LGT and Miller RR. A new simplified and accurate; method for determining ejection fraction with two-dimensional echocardiography
Circulation 64:744-753, 1981.
21. Ribeiro LGT, Hillis LD and Maroko PR. Evolution of epicardial R wave voltage following experimental coronary artery occlusion
Cardiovasc Res 15:425-429, 1981.
22. Ribeiro LGT, Spadaro J, Brandon TA, Kim H-S, Titus JL, Maroko PR and Miller RR. Effects of methoxy-verapamil (D600) on mortality and infarct size after coronary artery occlusion in rats. *Arq Bras Cardiol* 37:85-88, 1981.
23. Ribeiro LGT and Lefer AM. Etiology an pathophysiology of coronary artery spasm chapter 2, Coronary Artery Spasm Robert A Char!ne. Editor, Mount Kisco, NY, Futura Publishing Company, 39-64, 1983.
24. Ribeiro LGT, Brandon TA, Horak JK, Ware JA, Miller RR and Solis RT: Inhibition of platelet aggregation by verapamil: Quantification by in vivo and in vitro techniques. *Cardiovasc Pharm* 4 170-173, 1982.
25. Ribeiro LGT, Cheung W-m and Maroko PR. Influence of the extentof the zone at risk on the effectiveness of drugs in reducing infarct size
Circulation 66: 181-186, 1982.

26. Yasuda T, Ribeiro LGT and Maroko PR. Effect of hyaluronidase on experimental cerebral infarct size and mortality. *Laboratory Investigation* 46:400-404,1982.
27. Maroko PR, Ribeiro LGT and Goldberg S: Acute myocardial infarction - Coronary thrombosis and salvage of the ischemic myocardium, coronary artery spasm and thrombosis, and clinical aspects. Goldberg, S (ed) FA Davis, CO., Phila., PA, Cardiovascular Clinic Series, 14:(1) 191 -202, 1983.
28. Ribeiro LGT, Zalewski A and Maroko PR: Limitation of infarct size: Mechanisms of interventions, methods of evaluation and clinical applications. In Treatment of Myocardial Ischemia, Ed Pedro Zarco, Editorial Alhambra S A, Madrid Spain, 1982.
29. Hortak JK, Brandon TA, Ribeiro LGT, Ware JA Miller RR and Solis RT: Effects of Ethanol and Hemolysis on In Vivo and In Vitro Platelet Aggregation *J Cardiovasc Pharm* 4 (6). 1037-1041, 1982.
30. Faria DB, Cheung W-m, Ribeiro LGT and Maroko PR: The effects of lidocaine and droxicainide on myocardial necrosis. *J Am Coll Cardiol* 1(6).1447-1452,1983.
31. Endo T, Ribeiro LGT, Cheung W-m, Faria DB, Petranto MS and Maroko PR Relationship between the extent of the hypoperfused zone of the myocardium and the occurrence of ventricular fibrillation. *Am Heart J* 105(6): June, 1983.
32. Ribeiro LGT and Davies RO: Reduction in Cardiac Death and Reinfarction Rates Caused by Beta-Blockers After Acute Myocardial Infarction. *Rev Port Cardiol* 2(5):389-392, 1983.
33. Ribeiro LGT: Beneficial effects of beta-blockade on secondary prevention. *Arq Bras Cardiol* 40(2): 73-76, 1983.
34. Sweet CS, Gaul SL, Reitz PM, Blaine EH and Ribeiro LGT: Mechanism of action of enalapril in experimental hypertension and acute left ventricular failure. *J Hypertension* 1 (Suppl 1):53-63, 1983.
35. Vik-Mo H, Maroko PR and Ribeiro LGT: Comparative effects of propranolol, timolol and metoprolol on myocardial infarct after experimental coronary artery occlusion. *J Am Coll Cardiol* 4(4): 735-741, 1984.
36. Sweet CS, Ludden CT, Frederick CM and Ribeiro LGT: Hemodynamic effects of antiotensin and renin inhibition in dogs with acute left ventricular failure. *Am J Med* 77:7-12, 1984.
37. Sweet CS, Ludden CT, Frederick CMK, Bush LR and Ribeiro LGT: Comparative hemodynamic effects of enalaprilat (MK-422), a converting enzyme inhibitor and a renin inhibitor in dogs with left ventricular failure. *J C Pharmacol* 6:1067-1075, 1984.
38. Hock CE, Ribeiro LGT and Lefer AM: Preservation of ischemic myocardium by a new converting enzyme inhibitor, enalaprilic acid, in acute myocardial infarction *Am Heart J* 109 222-228, 1985.
39. Vlasses PH, Ribeiro LGT, Rotmensch HH, Bondi JV, Loper AE, Hichens M, Duniay MC and Ferguson RK: Initial evaluation of transdermal Timolol, serum concentrations and beta-blockade. *J Cardiovasc Pharmacol* 7.245-250, 1985.

40. Ribeiro LGT and Kasdin SL: Prognosis after an acute myocardial infarction secondary prevention. Rev Lat Car 5(6).561-569,1984.
41. Ribeiro LGT and Walker J F: Therapeutic applications of angiotensin converting enzyme inhibitors. Rev Braz Med 42(7).242-246, 1985.
42. Vik-Mo H, Yasay G, Ribeiro LGT and Maroko PR: Comparative effects of dobutamine and corwin, a beta-adrenergic partial agonist, in experimental left ventricular failure. J Cardiovasc Pharmacol 7 784-790, 1985.
43. Sweet CS, Ludden CT, Freerick CM, Ribeiro LGT, Nussberger J, Slater EE and Blaine EH: Hemodynamic effects of synthetic atrial natri uretic factor (ANF) in dogs with acute ventricular failure. EurJ Pharmacol 115:267-276, 1985.
44. Davis RF, DeBoar LW, Yasuda T, Rude RE, Ribeiro LGT and Maroko PR. Regional myocardial lidocaine concentration determines the antlysrhythmic effect in dogs after coronarv artery occlusion. Anesthesiology 62(2):155-60, 1985.
45. Ribeiro LGT and Kasdin SL: Identiflcation of high risk patients after an acute myocardial infarction Therapeutlc approach for secondary prevention Arq Bras Cardiol 44(3) 207-212, 1985.
46. Sweet CS, Ludden CT, Adkins E, Seymour AA, Emmert S and Ribeiro LGT: Enalapril in exerimental hypertension and acute heart failure: comparison with calcium channel blocker. J Cardiovasc Pharmacol 8(Suppl. 1):S 15 - S 19, 1986.
47. Vik-Mo, Hjos OD, Neelv JR, Maroko PR and Ribeiro LGT: Limitation of myocardial infarct size by metabolic interventions that reduce accumulation of fatty acid metabolites in ischemic myocardium. Am Heart J 111(6): 1048 - 1054. 1986.
48. Lefer DJ, Hock CE, Ribeiro LGT and Lefer AM: Effects of lisinopril, a new angiotensin converting enzyme inhibitor in a cyro-injury model of chronic left ventricular failure. Meth and Find Exptl Clin Pharmacol 8(6) 357-362, 1986.
49. Ribeiro LGT, Kasdin SL, Snyder DL, Fisher MB and Irvin JD. Beneficial effects of timolol in digitalized patients with atrial fibrillation and a rapid ventricular response Arq Bras Cardiol 46(3): 211-215,1986.
50. Vik-Mo H, Hastie R, Chir B and Ribeiro LGT : Hemodynamic and metalic evaluatlon of an acute left ventricular failure modelael induced y coronary artery embolization. Arq ras Carcdiol 48(3).13 g-145,1987,
51. Ribeiro LGT Hypertension. A paramount cardiovascular risk-factor in the western world. Arq Bras Cardiol 49(4):245-248, 1987.
52. Sweet CS, Emmert SE, Stabilito II and Ribeiro LGT: Increased survival in rats with congestive heart failure treated with enalapril. J Cardiovasc Pharmacol 1 10(6).639-642, 1987.
53. Lin SK and Ribeiro LGT: Kinetics of transdermal clonidine Arch Intern Med 147:1681, 1987.

54. Brown L, Nusbaum IM and Ribeiro LGT: Quality of life - now assess it in clinical trials. *Arq Bras Cardiol* 50(6): 365-368, 1988.
55. Islami Y, Ribeiro LGT: Lipid lowering effects on cardiovascular morbidity and mortality. Clinical evidence and therapeutic guidelines. *Arq Bras Cardiol* 51 (1) 43-48,1988.
56. Smith EF, Egan JW, Goodman FR, Zimmerman MB, Webb RL and Ribeiro LGT. Effects of two nonsulfhydryl angiotensin-converting enzyme inhibitors, CGS 14831 and CGS 16617, on myocardial damage and left-ventricular hypertrophy following coronary artery occlusion in the rat. *Pharmacology* 37:254-263, 1988.
57. Ribeiro LGT, Price BA and Irvin JD: Antiarrhythmic effects of timolol in patients with ventricular arrhythmias *Arq Bras Cardiol* 51(4) 359-364, 1988.

MANUSCRIPTS SUBMITTED TO PUBLICATION

1. Debauche TL, Ribeiro LGT, Brandon TA, French S, Sybers HD and Miller RR Prostacyclin in acute experimental myocardial platelet deposition and ventricular arrhythmias and comparison with nitroprusside.
2. Ribeiro LGT, Endo T, Minella AE, Cheung W-m, Hastie R and Maroko PR Accuracy of the 99mTc-albumin microspheres technique in measuring regional myocardial blood flow in dogs.
3. Ribeiro LGT, Price BA, Harris KE and Irvin JD: Antiarrhythmic effects of timolol maleate in patients with ventricular arrhythmias.

PUBLICATIONS

ABSTRACTS

1. Duarte GM, Ribeiro LGT and Carneiro RD. Acao do verapamil na insuficiencia coronariana—avaliacao pelo teste ergometrico(in Portuguese). *Arq Bras Cardiol* 28 (Suppl 2):288, 1975.
2. Ribeiro LGT, Louis EK, Davis MA and Maroko PR. Beneficial effect of 100% breathing on redistribution of regional myocardial blood flow. *Clin Res* 25:248A, 1977.
3. Ribeiro LGT, Hillis LD, Fischein MC, Davis MA, Maroko PR and Braunwald E. A new technique for demonstrating the efficacy of interventions designed to limit infarct size following coronary occlusion: beneficial effect of hyaluronidase. *Clin Res* 25:248A 1977.
4. Ribeiro LGT, Louie EK and Maroko PR: Influencia da inalacao de oxigenio na redistribuicao do fluxo coronarano (in Portuguese) *Arq Bras Car.* 54(Suppl 3): 232, 1977.

5. Ribeiro LGT, Louie EK, Hillis LD, Davis MA and Maroko PR Early increases in R wave voltage after coronary artery occlusion: A useful index of ischemia. Clin Res 26:264A, 1978.
6. Maroko PT, Ribeiro LGT, Kloner RA, Hillis LD and Braunwald E. Can myocardial damage following coronary occlusion really be reduced? Proceeding of VIII World Congress of Cardiology, 1978.
7. Maroko PR, Ribeiro LGT, Kloner RA, Ingwall JS and Caride VJ. Transport of ATP y liposomes into the schemic myocardium Circulation 58 (4) 11 58, 1978.
8. Maroko PR, Yasuda T, Ribeiro LGT, Bingham J, McKusick K, Fishbein MC and Strauss W: Global and regional left ventricular function by radionuclide ventriculography after coronary occlusion in rats. Its evolution and its correlation to infarct size. Circulation 58(4)11 - 175, 1978.
9. Ribeiro LGT, Yasud T, Lowenstein E, Braunwald E and Maroko PR. Comparative effects of anatomic infarct size of verapamil, ibuprofen and morphine-promethazine-chlorpromazine combination. Am J Cardiol 43.396, 1979.
10. Davis RF, Yasuda T, Deboer L, Ribeiro LGT, Rude R, Davis MA, Ronfeld RA and Maroko PR: Determinants of antiarrhythmic efficacy of lidocaine in acute myocardial infarction Am Cardiol 43:371,1979.
11. Young JB, Quinones MA, Waggoner AD, Ostojic M, Ribeiro LGT, Attar and Miller RR. Detection of prosthetic paravalvular leak.superiority of pulsed doppler echocardiography to clinical assessment and M-mode echocardiography. Clin Res 27:218A, 1979.
12. Ostojic MC, Quinones MA, Waggoner AD, Ribeiro LGT, Young JB, O'Donnell MJ and Miller RR. Pulsea doppler echocardiographic assessment of aortic insufficiency: Diagnostic accuracy and quantification of severity (submitted to publication) Clin Res 27:192A,1979.
13. Young JB, Quinones MA, Ribeiro LGT, Waggoner AD, Ostojic M, Shah A and Miller RR: etection of mitral regurgitation y pulsed doppler ecocardiogranY dlnagnostic accuracy of the time nterval histogram. C 1 in Res 27 1 96A. 17
14. Ribeiro LGT and Yasuda T: Reperfusao coronariana em ratos - efeitos beneficos do verapamil. (in Portuguese). Arq Bras Cardiol. Suplemento ao Congresso 25, 1978
15. Maroko P, Ribeiro LGT, Hillis LD and Braunwald E: Sinais electro cardiograficos de necrose em pacientes com infarto agudo do miocardio — Efeitos beneficos ao Hialuronidase (in Portuguese). Arq Bras Caraiol. Suplemento do Congresso 414, 1978.
16. Hillis LD, Ribeiro LGT, Maroko PR and Braunwald E: Infarto experimental do miocardio-nova tecnica para medir alteracoes ao seu tamanho (in Portuguese). Arq Bras Cardiol. Suplemento do Congresso 279, 1978.
17. Miller RR, Ribeiro LGT, Brandon TA, Hopkins DG, Reduto LA and Taylor AA: Effects of Prostacyclin on regional myocardial blood flow, hemo Dynamics, infarct size and mortality after experimental coronary occlusion. Clin Res 27.199A, 1979.

18. Ribeiro LGT, Brandon TA, Hopkins DG, Reduto L and Miller RR: Identification and quantification of a hyperemic zone bordering myocardial ischemic area. Clin Res 27:198A, 1979.
19. Ribeiro LGT, Brandon TA and Miller RR. Mortality after coronary artery occlusion-beneficial effects of D-600 (Methoxy-Verapamil) Clin Res 27:198A, 1979.
20. Ribeiro LGT, Yasuda T, Lowenstein E, Maroko PR and Braunwald E. Reducao no tamanho do infarto ao miocardio pelo uso do verapamil (in Portuguese). Arq Bras Cardiol 32:Supl 1-176, 1979.
21. Young JB, Ribeiro LGT, Quinones MA, Waggoner AD, Ostojic M and Miller RR. Importancia da doppler ecocardiografia no diagnostico e avaliacao da insuficiencia aortica e mitral (in Portuguese). Arq Bra Cardiol 32;Supl 1-51, 1979.
22. Verani MOS, Ribeiro LGT and Miller RR: Cintilografia cardiaca com thallium durante esforco-correlacoes com electracardiograma de esforco e cinecoronariografia (in Portuguese). Arq Bras Cardiol 2 Suppl 1-159, 1979.
23. Spadaro J, Ribeiro LGT, Brandon TA, Hare C and Miller RR: Oclusao coronariano — Reducao na mostalidade pelo methoxiverapamil (D-600) (in Portuguese) Arq Bras Cardiol 32: Suppl 1-186, 1979.
24. Ribeiro LGT, Quinones MA, Reduto LA, Winters WL and Miller RR. Assessment of left ventricular regional wall motion with two-dimensional echocardiography and gated cardiac imaging comparison to angiography. Circulation 59:11 - 137, 1979.
25. Miller RR, Ribeiro LGT, Brandon TA, Hopkins and Reduto LA: Reduction in mortality independent of infarct size by nitro-prusside in experimental coronary artery occlusion. Circulation 59:11-124,1979.
26. Hopkins D, Pratt CM, Ribeiro LGT and Miller RR: Predictors of cardiac mortality in patients with severe ST-segment depression on treadmill stress testing. Circulation 59:11-266, 1979.
27. Quinones MA, Reduto LA, Nelson JG, Ribeiro LGT, Young JB, Winters WL and Miller RR. A new simplified method for determining left ventricular ejection fraction by two-dimensional echocardiography. Circulation 59:11- 1979.
28. Fuller CM, Pratt CM, Nussey GA, Ribeiro LGT, Taylor AA and Miller RR: Antiarrhythmic efficacy of propranolol immediately following coronary bypass surgery. Circulation 59:184, 1979.
29. DeBauche TL, Ribeiro LGT, Brandon TA and Miller RR Value of re-coronary artery occlusion heart rate in predicting post-occlusion and reperfusion ventricular fibrillation in the experimental animal Clin Res 27:226A, 1979.
30. Ribeiro LGT, Quinones MA, Reduto LA, Del Ventura L, Waggoner AD, Nelson JG, Winters WL and Miller RR. Left ventricular segmental wall motion: gated cardiac blood pool imaging versus two-dimensional echocardiography. Clin Res 27.733A, 1979.

31. Brandon TA, Ribeiro LGT, Hopkins DG, Reduto LA and Miller RR. Effects of lidocaine on hemodynamics, regional myocardial blood flow, infarct size and mortality Clin Res 27:725A, 1979.
32. Pratt CM, Nussey GN, Hopkins DG, Kanon S, Ribeiro LGT, DeBakey ME and Miller RR. Follow-up of a high-risk onset of coronary artery disease patients with marked ischemic response to exercise: comparison of medical and surgical groups. Clin Res 27:72A, 1979
33. Ribeiro LGT, Brandon TA, Horak SK, Solis RS and Miller RR: Inhibition of platelet aggregation by verapamil quantification by in vitro and in vivo techniques Clin Res 27.7A, 1979
34. Ribeiro LGT, DeBauche TL, Brandon TA, Reduto LA and Maroko PR: Verapamil and nifedipine during coronary artery reperfusion: effects on ventricular arrhythmias and regional myocardial blood flow. Clin Res 27:773, 1979.
35. Ribeiro LGT, Quinones MA, Reduto LA, Del Ventura L, Waggoner AD, Nelson JG, Winters WL and Miller RR. Left ventricular segmental wall motion: comparison of gated cardiac blood pool imaging with two-dimensional echocardiography. Clin Res 28:205A, 1980.
36. Ribeiro LGT, Brandon TA, Horak JK, Solis RT and Miller RR: Documentation of inhibition of platelet aggregation by verapamil quantification by in vitro and in vivo techniques. Clin Res 28:204A, 1980.
37. Solis RT, Ribeiro LGT, Horak JK, Brandon TA and Miller RR: adrenergic inhibition of platelet aggregation in vitro and in vivo. Clin Res 28:244A, 1980.
38. DeBauche TL, Brandon TA, Ribeiro LGT, Sybers HD, Thompson W and Miller RR: Inhibition of platelet aggregation in ischemic myocardium and antiarrhythmic effects of prostacyclin in experimental artery occlusion. Clin Res 28:165A, 1980.
39. Ribeiro LGT, Hillis LD and Maroko PR: Evolution of epicardial R wave voltage following experimental coronary artery occlusion. Clin Res 28:205A, 1980.
40. Ribeiro LGT, Cheung W-m, Miller R and Maroko PR. Effects of metoxy verapamil, a new calcium blocker, on the extent of myocardial necrosis using arteriography to assess the myocardium at risk. Clin Res 28:205A, 1980.
41. Pratt CM, Nussey G, Hopkins DG, Kanon D, Ribeiro LGT, DeBakey ME and Miller RR: Long Term medical surgical follow-up of a high risk subset of coronary artery disease patients with marked ischemic response to exercise. Clin Res 28:203A, 1980.
42. Ribeiro LGT, DeBauche TL, Brandon TA, Reduto LA, Maroko PR and Miller RR: Comparative effects of verapamil and nifedipine on reactive hyperemia and ventricular arrhythmias during coronary artery reperfusion. Am J Cardiol 45:46 1, 1980.
43. Cheung W-m, Ribeiro LGT and Maroko PR: Is the effectiveness of a drug in reducing myocardial injury dependent on the extent of the zone at risk? Circulation, 62(Suppl 111) 314, 1980.

44. Maroko PR, Ribeiro LGT, Yasuda T, Davis RF, DeBoer LWV, Strauss HW, Leinbach RC and Gold HK: Effect of interventions on the protection of the ischemic myocardium in experimental animals and in patients. Proceedings of VIII European Congress of Cardiology Page 116. June, 1980.
45. Ribeiro LGT, Brandon TA, Horak JK, Solis RT and Miller RR: Inhibition of platelet aggregation by verapamil: further rationale for the use of calcium antagonists in coronary artery disease *Circulation*, 62 (Suppl III): 111-293, 1980.
46. DeBauche TL, Brandon TA, Ribeiro LGT, Sybers HD and Miller RR: Comparative Inhibitory actions of prostacyclin and nitro-prusside on platelet deposition in ischemic myocardium and ventricular fibrillation following coronary artery occlusion. *Circulation* 62(Suppl III): III-309, 1980.
47. Endo T, Ribeiro LGT, Faria DB, Cheung W-m, Petranto M and Maroko PR: Correlation between the extent of the zone of hypoperfusion and the incidence of ventricular fibrillation after experimental coronary artery occlusion. *Clin Res* 29.188A, 1981.
48. Maroko PR, Cheung W-m, Faria DB, Endo T, Petranto and Ribeiro LGT: Do interventions that reduce infarct size alter mortality rate? *Clin Res* 29.221 A, 1981.
49. Ribeiro LGT, Faria DB, Cheng W-m and Maroko PR: How accurate is the measurement of experimental infarct size when only selected left ventricular slices are used? *Clin Res* 29.235A, 1981.
50. Iwasaki T, Faria DB, Cheung W-m, Ribeiro LGT and Maroko PR. The importance of the source of hyaluronidase in determining its effectiveness in reducing infarct size. *Clin Res* 29. 210A, 1981.
51. Carvalho MA, Aloia L, Mello MG Jr, Carneiro RD and Ribeiro LGT: Beneficial effects of verapamil on myocardial ischemic injury Evaluation by precordial ST segment mapping. *Clin Res* 29:180A, 1981.
52. Faria DB, Iwasaki T, Endo T, Cheung W-m, Ribeiro LGT and Maroko PR. Calcium Antagonists: Their effectiveness in decreasing the occurrence of ventricular fibrillation and reducing infarct size after a coronary artery occlusion. *Am J Cardiol* 47.443, 1981.
53. DeBauche TL, Brandon TA, Ribeiro LGT, Holyfield K and Muller RR. Effect of Prostacyclin on ventricular arrhythmias and intracardiac conduction in myocardial ischemia. *Am J Cardiol* 47:437, 1981.
54. Carvalho MA, Ribeiro LGT, Aloia L, Mello MG, Carneiro RD and Maroko PR: Efeitos benéficos de verapamil sobre o miocárdio isquêmico — avaliação pelo mapeamento precordial do segmento ST (in Portuguese). *Arq Bras Cardiol* 36(Suppl I):135, 1980.
55. Faria DB, Cheung W-m, Hastie R, Petranto Maroko PR and Ribeiro LGT. Effect of prostacyclin on infarct size — analysis of discrepancies. *Circulation* 64 (Suppl 1 IV):IV-280, 1981.
56. Endo T, Ribeiro LGT, Cheung W-m and Maroko PR: Reduction in hemorrhage and the extent of necrosis by methoxy-verapamil in dogs with coronary artery reperfusion. *Circulation* 64:(Suppl IV):IV-98, 1981.

57. Cheung W-m, Kjekshus H, Ribeiro LGT and Maroko PR: Quantification of “no-reflow phenomenon” by dual autoradiography after different times of occlusion and its relationship to necrosis. *Am Coll Cardiol* 49:1047, 1982.
58. Faria DB, Cheung W-m, Ribeiro LGT and Maroko PR: Three-dimensional analysis of infarct size reduction. *Clin Res* 30:184A, 1982.
59. Iwasaki T, Lumia FJ, Germon PA, Maranhao V, Biggs R and Ribeiro LGT. Exercise radionuclide ventriculography—correlation with clinical parameters and the severity of coronary artery disease. *Clin Res* 30:195A, 1982.
60. Horak JK, Ribeiro LGT, Brandon TA, Ware JA, Solis T and Miller RR. Etanol and platelet function—demonstration of disparate effects of high and low doses on platelet aggregation. *Clin Res* 30:194A, 1982.
61. Zalewski A, Faria DB, Cheung W-m, Ribeiro LGT and Maroko PR. Comparison of the effectiveness of various calcium antagonists in protecting acutely ischemic myocardium *Clin Res* 30:232A. 1982.
62. Ribeiro LGT, Bowker BL and Maroko PR: Beneficial effects of berberiane on early mortality after experimental coronary artery occlusion in rats. *Circulation* 66(II) II-56, 1982.
63. Vik-Mo H, Maroko PR and Ribeiro LGT: Comparative effects of propranolol, timolol and metoprotol after coronary occlusion *Circulation* 66 (II):85, 1982.
64. Zalewski A, Faria DB, Cheung W-m, Ribeiro LGT and Maroko PR. Comparative effects of five calcium antagonists on infarct size and mortality after coronary artery occlusion. *Circulation* 66(II):II-66, 1982.
65. Zalewski A, Faria DB, Krol R, Ribeiro LGT and Maroko PR: Striking infarct size reduction y various interventions when the zone at risk is smal. *Circulation* I (2):660, 1983.
66. Krol R, Maranhao V, Ribeiro LGT and Maroko PR: Usefulness of selective coronary dye-dilution curves in detecting collateral circulation and evaluating the effects of rugs. *Circulation* 1(2):702, 1983.
67. Ribeiro LGT, Reitz PM and Sweet CS. Experimental myocardial infarction—effects of timolol in ischemic injury and myocardial blood flow. *Proceedings of the II World Conference on Clinical Pharmacology and Therapeutics*. 134, 1983.
68. Vlasses PH, Ribeiro LGT, Rotmensch HH, Bondi J, Hichens M, Loper AG, Clementi RA, Abrams WB, Ferguson RK. Initial evaluation oftransdermal timoiol. Serum concentrations and beta-blockade.*Clin Pharmacol and Therapeutics*: 35(2) 279,1984.
69. Ribeiro LGT, Vlasses PH, Bond J, Loper AE, Dunlay MC, Rotmensch HH, Ferguson RK and Abrams WB: Timolol transdermal administration skin flux, pharmacolodynamic effects and skin irritation evaluation. *Clin Res* 32:246A, 1984.
70. Sweet CS and Ribeiro LGT: Improvement in left ventricular failure by MK-422 (A new intravenous angiotensin converting enzyme Inhibitor. *Clinical Research* 32:21AO, 1984.

71. Ribeiro LGT, Gaul SL and Sweet CS: Transmural variation in myocardial perfusion between the apex and the base of the heart. Clin Res 32 200A, 1984.
72. Vik-Mo H, Ribeiro LGT and Maroko PR. Infarct size reduction by decrease in free fatty acid metabolish — additive effects of oxfenicine ana nicotinic acid. Eur Heart J 5:91, 1984.
73. Ribeiro LGT, Fisher MB, Mallis G, Morganroth J, Kostis JB and Irvin JD. Beneficial effects of timolol on ventricular response rate in patients with chronic atrial fibrillation. Clin Res 32(3):680A, 1984.
74. Ribeiro LGT, Price BA, Marlon A, Pool PE, Salel AE, Whalen JJ and Irvin JD: Efficacy of timolol in the treatment of malignant ventricular arrhythmias. Clin Res 32(3):681A, 1984.
75. Sweet CS, Ribeiro LGT, Ludden CT and Blaine EH: Hemodynamics and renal electrolyte atrial natriuretic factor in dogs with acute left ventricular failure. Clin Res 32(3):683A, 1984.
76. Sweet CS, Nugent LW, Mulcahy W and Ribeiro LGT. A new experimental heart failure model-beneficial effects of felodipine a potent calcium antagonist. Arq Bras Cardiol 43(1): 55, 1984.
77. Ribeiro LGT, Walker JF, Whalen JJ, Davies RO and Smith, WM: Beneficial effects of enalapril, a new angiotensin converting enzyme inhibitor, in the treatment of hypertenison and cogestive heart failure. Arq Bras Cardiol 43(1): 109, 1984.
78. Hock CE, Ribeiro LGT and Lefer AM. Effects of enalaprilic acid (MK-422) in myocardial infarction. Federation Proceedings 43.355, 1984.
79. Sweet CS, Ribeiro LGT, Lunden CT, Blaine EH, Slater EE, Nussberger J and Nutt RF: Hemodynamic and renal electrolyte effects of synthetic atrial natriuretic factor in dogs with acute left ventricular failure. Circulation 70(4):II-333, 1984.
80. Vik-Mo H, Mjos OD, Maroko PR, Ribeiro LGT and Neely JR. Effects of nicotinic acid, oxfenicine and timolol on fatty acid metabolism in normal and ischemic myocardium in dogs. J Molec Cell Cardiol 16(2):48, 1984
81. Saris SD, Lowenthal DT, Porter RS, Bondi J, Loper AE, Dunlay MC, Goodwin MJ and Ribeiro LGT: Seven-day transdermal administration of timolol. Clin Pharm and Thera 37(2):226, 1985.
82. Brum JM, Dotson BS, Ribeiro LGT, Bove AA, Ghat G. Neuropeptide y coronary vasoconstriction is independent on adrenergic and muscarinic receptors. J Am Coli Cardiol 7(2).251A. 1986.
83. Smith III EF, Egan JW, Goodman FR, Zimmerman MB and Ribeiro LGT. Cardioprotective effect of the angiotensin converting enzyme Inhibitor CGS 14831 in rats FedProc 45.689, 1986.
84. Vik-Mo H, Ribeiro LGT, Maroko PR. A model of acute left ventricular failure in dogs—hemodynamic and metabolic evaluation Proc of x Worl Cong Card 105, 1986.

85. Vik-Mo H, Ribeiro LGT, Maroko PR: Myocardial oxygen consumption after corwin and dobutamine in the normal and failing left ventricle. Proc of X World Cong Card 518, 1986.
87. Watters JT, Benz JR, Maher TE, Ivankoe LD, Hurley ME and Ribeiro LGT: CGS 14824A, a new non-sulphydryl angiotensin converting enzyme inhibitor (ACEI) — efficacy in patients with mild to moderate hypertension. J Clin Pharm 27(9). 718, 1987.
87. deSilva JK, Hurley ME, Weclaw-Hakim C and Ribeiro LGT. Efficacy and safety of CGS 16617 a new non-thiol angiotensin converting enzyme inhibitor, in patients with mild to moderate hypertension. J Clin Pharm 27(9).717, 1987.

ABSTRACTS SUBMITTED TO PUBLICATION

1. Ribeiro LGT, Dunlay MC, Bondi JV, Loper AE, Ferguson RK and Vlasses RH.A one-week timolol transdermal patch—is this feasible? 1984.
2. Sweet CS, Emmert SE, Stabilito I and Ribeiro LGT: Prolonged survival in rats with healed myocardial infarction by enalapril. 1986.
3. Smith EF, III, Egan JW, Goodman FR, Zimmerman MB and Ribeiro LGT. Beneficial effects of two new angiotensin converting enzyme Inhibitors (ACEI) following coronary occlusion in the rat. 1986.