

Name: Rita G. Laurence, B.S.

Position Title: Laboratory Manager

Education

Institution	Degree	Year	Field of Study
Simmons College	B.S.	1982	Biology

Certification

1984 Certificate, American Association for Laboratory Animal Science

Award:

1981 National Science Foundation Undergraduate Research Participation Award
Simmons College

Presentations

2003 Invited Lecturer Clinical Application of Anatomy
Course AT 501.0, Harvard Medical School

1984 Annual Technician's Night of the New England Branch of the American
Association for Laboratory Animal Science, Harvard University

1981 National Science Foundation Undergraduate Research
Participation Symposium, Simmons College

Experience

1985-present Senior Research Coordinator of the Large Animal Operating Room,
Laboratory Manager of the Cardiac Surgical Research Laboratory
Brigham & Women's Hospital

Publications

1. Kim S, Lim YT, Soltesz EG, De Grand AM, Lee J, Nakayama A, Parker JA, Mihaljevic T, Laurence RG, Dor DM, Cohn LH, Bawendi MG, Frangioni JV. Near-infrared fluorescent type II quantum dots for sentinel lymph node mapping. Nat Biotechnol. 2004 Jan;22(1):93-7. Epub 2003 Dec 07.
2. Sepic J, Wee JO, Soltesz EG, Laurence RG, Aklog L. Intraluminal coronary shunting preserves regional myocardial perfusion and function Heart Surg.Forum. 2003;6(6):E120-5.
3. Sepic J, Wee JO, Soltesz EG, Hsin MK, Cohn LH, Laurence RG, Aklog L. Cardiac positioning using an apical suction device maintains beating heart hemodynamics. Heart Surg Forum. 2002;5(3):279-84.

4. Danton MH, Byrne JG, Hsin M, Laurence R, Cohn LH, Aklog L. Right ventricular volume measurement using the conductance catheter method: validation in excised porcine hearts. *ASAIO J.* 2002 Sep-Oct;48(5):514-9.
5. Danton MH, Byrne JG, Flores KQ, Hsin M, Martin JS, Laurence RG, Cohn LH, Aklog L. Modified Glenn connection for acutely ischemic right ventricular failure reverses secondary left ventricular dysfunction. *J Thorac Cardiovasc Surg.* 2001 Jul;122(1):80-91.
6. Martin JS, Sayeed-Shah U, Byrne JG, Danton MH, Flores KQ, Laurence RG, Cohn LH. Excimer versus carbon dioxide transmyocardial laser revascularization: effects on regional left ventricular function and perfusion. *Ann Thorac Surg.* 2000 Jun;69(6):1811-6.
7. Martin JS, Byrne JG, Ghez OY, Sayeed-Shah U, Grachev SD, Laurence RG, Cohn LH. LV-powered coronary sinus retroperfusion reduces infarct size in acutely ischemic pigs. *Ann Thorac Surg.* 2000 Jan;69(1):84-9.
8. Sayeed-Shah U, Mann MJ, Martin J, Grachev S, Reimold S, Laurence R, Dzau V, Cohn LH. Complete reversal of ischemic wall motion abnormalities by combined use of gene therapy with transmyocardial laser revascularization. *J Thorac Cardiovasc Surg.* 1998 Nov;116(5):763-9.
9. Chen FY, Aklog L, deGuzman BJ, Ahmad RM, Laurence RG, Couper GS, Cohn LH, McMahan TA. An engineering model of dynamic cardiomyoplasty. II. Clinical applications. *Ann Biomed Eng.* 1998 May-Jun;26(3):454-61.
10. Chen FY, Lautz DB, deGuzman BJ, Aklog L, Ahmad RM, Laurence RG, Couper GS, Cohn LH, McMahan TA. An engineering model of dynamic cardiomyoplasty. I. *Ann Biomed Eng.* 1998 May-Jun;26(3):441-53.
11. Mesana TG, Ferzoco SJ, Reul RM, Sayeed-Shah U, Karamichalis JM, Laurence RG, Schoen FJ, Cohn LH. Innovative techniques in skeletal muscle cardiac assistance: first experimental study on minimally invasive aortomyoplasty and cardiomyoplasty. *ASAIO J.* 1997 Sep-Oct;43(5):M791-6.
12. Aklog L, Chen FY, deGuzman BJ, Murphy MP, Smith WJ, Laurence RG, Appleyard RF, Cohn LH. Right latissimus dorsi cardiomyoplasty improves left ventricular energetics. *Ann Thorac Surg.* 1997 Sep;64(3):670-7.
13. deGuzman BJ, Lautz DB, Chen FY, Laurence RG, Ahmad RM, Horvath KA, Cohn LH. Thoracoscopic transmyocardial laser revascularization. *Ann Thorac Surg.* 1997 Jul;64(1):171-4.

14. Chen FY, deGuzman BJ, Aklog L, Lautz DB, Ahmad RM, Laurence RG, Couper GS, Cohn LH, McMahon TA. Decreased myocardial oxygen consumption indices in Dynamic cardiomyoplasty. *Circulation*. 1996 Nov 1;94(9 Suppl):II239-44.
15. Chen FY, Aklog L, deGuzman BJ, Laurence RG, Couper GS, Appleyard RF, Cohn LH, McMahon TA. New technique measures decreased transmural myocardial pressure in cardiomyoplasty. *Ann Thorac Surg*. 1995 Dec;60(6):1678-82.
16. Horvath KA, Smith WJ, Laurence RG, Schoen FJ, Appleyard RF, Cohn LH. Recovery and viability of an acute myocardial infarct after transmyocardial laser revascularization. *J Am Coll Cardiol*. 1995 Jan;25(1):258-63.
17. Aklog L, Murphy MP, Chen FY, Smith WJ, Laurence RG, Appleyard RF, Cohn LH. Right latissimus dorsi cardiomyoplasty improves left ventricular function by increasing peak systolic elastance (Emax). *Circulation*. 1994 Nov;90(5 Pt 2):II112-9.
18. Smith WJ, Murphy MP, Appleyard RF, Rizzo RJ, Aklog L, Laurence RG, Cohn LH. Prevention of complement-induced pulmonary hypertension and improvement of right ventricular function by selective thromboxane receptor antagonism. *J Thorac Cardiovasc Surg*. 1994 Mar;107(3):800-6.
19. Byrne JG, Appleyard RF, Sun SC, Couper GS, Sloane JA, Laurence RG, Cohn LH. Cardiac-derived thromboxane A2. An initiating mediator of reperfusion injury? *J Thorac Cardiovasc Surg*. 1993 Apr;105(4):689-93.
20. Sun SC, Diaco M, Couper GS, Masetti P, Laurence RG, Cohn LH. Improved distribution of antegrade cardioplegia solution with simultaneous coronary sinus occlusion following acute coronary artery occlusion. *J Surgical Research* 53:98-102,1992.
21. Lee CC, Aruny JE, Laurence RG, Appleyard RF, Couper GS, Cohn LH. Bench coronary angiography: A potentially useful method to assess coronary artery disease in the older donor heart without cath lab angiography. *J Heart and Lung Transplantation* 11:693-7, 1992.
22. Sun SC, Appleyard R, Masetti P, Byrne JG, Laurence RG, Marsh JD, Cohn LH. Improved recovery of heart transplants by combined use of oxygen-derived free radical scavengers and energy enhancement. *J Thorac Cardiovasc Surg*. 1992 Sep;104(3):830-7.
23. Byrne JG, Appleyard RF, Lee CC, Couper GS, Scholl FG, Laurence RG, Cohn LH. Controlled reperfusion of the regionally ischemic myocardium with leukocyte-Depleted blood reduces stunning, the no-reflow phenomenon, and infarct size. *J Thorac Cardiovasc Surg*, 103:66-72, 1992.

24. Reimold SC, Byrne JG, Caguioa ES, Lee CC, Laurence RG, Peigh PS, Cohn LH, Lee RT. Load-dependence of the effective regurgitant orifice area in a sheep model of aortic regurgitation. *JACC*, 18(4):1085-90, 1991.
25. Masetti P, DiSesa VJ, Schoen FJ, Sun SC, Byrne JG, Appleyard RF, Laurence R, Cohn LH: Ischemic injury prior to cardiac transplantation does not cause coronary arteriopathy in experimental isografts. *J Heart Transplant* 10: 597-9, 1991.
26. Sun SC, Diaco M, Laurence R, DiSesa VJ, Cohn LH: The dynamics of antegrade cardioplegia with simultaneous coronary sinus occlusion: effects on aortic root infusion pressure, coronary sinus pressure and myocardial cooling. *J Thorac Cardiovasc Surg* 101:517-525, 1991.
27. Diaco M, DiSesa VJ, Sun SC, Laurence R, Cohn LH. Cardioplegia for the immature myocardium: a comparative study in the neonatal rabbit. *J Thorac Cardiovasc Surg* 100;6:910-913, 1990.
28. Raza ST, Tam SKC, Sun SC, Laurence R, Berkovitz B, Shemin R, and Cohn LH: Sequentially paced heterotopic heart transplant in the left chest provides improved circulatory support for the failed left ventricle: A potential biologic bridge to orthotopic transplantation. *J Thorac Cardiovasc Surg* 98:266-74, 1989.
29. Sun SC, Raza ST, Tam SKC, Laurence R, Cohn, LH: Effects of antegrade cardioplegia with simultaneously controlled coronary sinus occlusion on preservation of regionally ischemic myocardium after acute coronary artery occlusion and reperfusion, *J Thorac Cardiovasc Surg* 96:626-33, 1988.