

LAURINE M. BOW, Ph.D., HCLD (ABB)
102 Northam Road
Amston, CT 06231

Phone (203) 785-2068
Cell: (860) 682-2363
e-mail:laurinebow@aol.com

CLINICAL EXPERIENCE

2012 – present **DIRECTOR, HISTOCOMPATIBILITY AND IMMUNE EVALUATION LABORATORY, Yale University School of Medicine, New Haven, CT**
Responsible for directing all clinical services of the Histocompatibility Laboratory, which provides services for the **Yale New Haven Hospital** organ transplant program, which includes heart kidney, pancreas and liver.

1992 - present **DIRECTOR, TRANSPLANT IMMUNOLOGY, Hartford Hospital, Hartford CT.** Responsible for directing all clinical services of the Histocompatibility Laboratory, which provides services for the **Hospital** organ transplant program, for hearts, kidneys and livers, the transplant program for **Baystate Health Systems** in Springfield, MA, and the **Life Choice Organ Procurement Organization**

2006 - 2012 **DIRECTOR, HISTOCOMPATIBILITY AND IMMUNE EVALUATION LABORATORY, Yale University School of Medicine, New Haven, CT**
Served as consulting director for all clinical histocompatibility services for the kidney, heart, pancreas and liver transplant programs at Yale.

1996 - 2009 **DIRECTOR, TRANSPLANT IMMUNOLOGY, Montefiore Medical Center, Bronx, New York.** Served as consulting director for all clinical laboratory histocompatibility services for the heart and kidney transplant programs at Montefiore

ADMINISTRATIVE EXPERIENCE

HARTFORD HOSPITAL, Hartford, Connecticut

2004 – 2012 **VICE PRESIDENT FOR RESEARCH.** Serves as the Institutional Official for the Human Research Protection Program, Institutional Official for the Animal Care and Use Committee, Chair of the Research Committee, Official responsible for authorization of all grants and contracts pertaining to

research, and Official responsible for negotiating intellectual property agreements with faculty and staff. Also, Chair of International Scholars Exchange Committee and Institutional Official for J1 Visa Program, which coordinates an active scholar exchange program with Shandong University. Also serves on the External Advisory Committee for Post doctoral Masters Program in Clinical Research at the University of Puerto Rico.

ACADEMIC APPOINTMENTS

2012 – present Assistant Professor
Yale University School of Medicine
Dept of Surgery

1992 - present Assistant Professor
Department of Surgery
University of Connecticut Health Center
Farmington, CT

1996 - 2002 Adjunct Assistant Professor
The Graduate School - Pharmaceutical Sciences
University of Connecticut
Storrs, CT

EDUCATION

University of Connecticut, Storrs, CT; Ph.D. in Molecular Genetics and Cell Biology; 1991

St. Joseph's College, West Hartford, CT; M.S.; Biology 1982

University of Connecticut, Storrs, CT B.S. in Allied Health; 1974

CERTIFICATION

High-complexity Clinical Laboratory Director (HCLD), American Board of Bioanalysis, in the field of Diagnostic Immunology

PROFESSIONAL ACTIVITIES

- Member, Senior Leadership Board of CICATS (Connecticut Institute for Clinical and Translational Science)
- Chair, Beacon (Biomedical Engineering Alliance and Consortium);
- Board of Directors, Life Choice Donor Services 2002 – present
- Board of Directors, World Affairs Council; 2003 – present
- Board of Directors, New York Organ Donor Network; 2006 – 2009
- United Network for Organ Sharing Histocompatibility Rep 1993-1995
- UNOS Region I Histocompatibility Representative 2003-2005

ABSTRACTS PRESENTED:

1. Bow L, Schweizer R, Sharpe R. Cyclosporine Incubated Platelets Retain Function and Release Cyclosporine. Federation of American Societies for Experimental Biology, Anaheim, CA, April 1985.
2. Bow L, Schweizer R, Mihalyo M, Sharpe R. Use of Tolerance Induction to Selectively Increase the Specificity of Hybridomas Against Human Cell Subsets. American Society of Histocompatibility and Immunogenetics, San Diego, CA, October 1985.
3. Bow L and Strausbaugh L. Molecular Analysis of Histone Genes in *Drosophila willistoni*. UCLA Symposia on Molecular Evolution, Lake Tahoe, CA, February 1989.
4. Reynolds B, Michalski P, Krisiunas L, Schweizer R, Bow L. Comparison of Flow Cytometry (FC) and Antiglobulin (AHG) Augmented Cytotoxicity Crossmatching. 15th Annual ASHI Meeting, Toronto, Ontario, Canada, September 1989.
5. Dwyer D, Michalski P, Schweizer R, Krisiunas L, Bow L. Experience with Dithiothreitol Crossmatching in a Highly Sensitized Population. 15th Annual ASHI Meeting, Toronto, Ontario, Canada, September 1989.
6. Bow L, Pleau M, Reynolds B, Schweizer R. Induction of Heat Shock Proteins (HSP70) in Human Lymphoid Cells by Cyclosporine A. UCLA Symposia on Molecular and Cellular Biology, January 27-February 8, 1990.
7. Bow L, Mather J, Schweizer R. Detection and Semiquantitation of Intracellular HSP72 BY Flow Cytometry. 8th International Congress of Immunology, Budapest, Hungary, August 23-28, 1992.
8. Michalski P, Bow L, Roper L, and Schweizer R. Cytotoxin Antibody Formation Following Nonimmunologic Loss of Kidney Transplants. 18th Annual Meeting American Society for Histocompatibility and Immunogenetics, Kansas City, Missouri, October 16-21, 1992.

9. Bow L, Alberghini T, Bergmann L, Schweizer R. Discrimination of the SLA cc and dd Haplotype of Mini-Swine by Polymerase Chain Reaction. 18th Annual Meeting American Society for Histocompatibility and Immunogenetics, Kansas City, Missouri, October 16-21, 1992.
10. Krause P, Sikand V, Bow L, Christianson D, Cartter M, Magera J, and Persing D. PCR Diagnosis of *Babesia microti* Infection in Humans. 33rd ICAAC, New Orleans, Louisiana, October 17-20, 1993.
11. Azrin M, Mitchel J, Bow L, Alberghini T, Peck R, Fram D, Waters D, McKay R. Effect of Local Delivery of Heparin on Platelet Deposition During In Vivo Balloon Angioplasty Using Hydrogel-coated Balloons, American Heart Association, 66th Scientific Sessions, Houston, Texas, November 8-11, 1993.
12. Azrin M, Mitchel J, Pedersen C, Curley T, Bow L, Alberghini T, Waters D, McKay R. Inhibition of Smooth Muscle Cell Proliferation In-vivo Following Local Delivery of Antisense Oligonucleotides to C-myb During Balloon Angioplasty. JACC 1994; 1A-484A: 395A.
13. Onyeji C, Nightingale C, Tessier P, Nicolau D, Bow L. Activities of Clarithromycin, Azithromycin and Ofloxacin in Combination with Liposomal or Unencapsulated GM-CSF Against Intramacrophage *Mycobacterium Avium-M. Intracellulare*. International Congress of Antimicrobial Agents and Chemotherapy - Orlando, Florida, 1994.
14. Chen C, Gillam L, Knipp D, Bow L, Li L, Chen L, McKay R, Fallon J, Waters, D, A. Porcine Model of Myocardial Hibernation: Metabolic and Structural Adaptations. Circulation 1994; 90(4): I-369
15. Mitchel J, Fram D, Palme D, Foster R, Hirst J, Azrin M, Alberghini T, Bow L, Waters D, McKay R. Enhanced intracoronary thrombolysis using the Dispatch™ catheter. Circulation 1994;90:I-493
16. Michael J, Azrin M, Schwedick M, Bow L, Waters D, McKay R. Local Delivery of heparin with a novel iontophoretic catheter - quantitative heparin delivery and effect on platelet deposition following balloon angioplasty. Circulation 1994; 90:I-492
17. Mitchel J, Fram D, Azrin M, Bow L, Alberghini T, Eldin A, Shwedick M, Waters D, McKay R. Localized intracoronary delivery of urokinase with the channeled balloon: pharmacokinetics of drug delivery and washout. JACC 1995; 25:347A

18. Azrin M, Mitchel J, Bow L, Alberghini T, Grant G, Kaplan A, Waters D, McKay R. Local delivery of urokinase to porcine coronary arteries using the local med infusion sleeve. JACC 1995: 25:347A
19. Mitchel J, Fram D, Shwedick M, Alberghini T, Bow L, McKay R. Intravascular thrombolysis-comparative efficiency of local versus conventional urokinase delivery techniques in an in-vivo porcine thrombus model. Circulation in press
20. Bow L, Krisiunas L, Shapiro D, Roper L, and Schweizer R. Correlation of Kidney Graft Rejection Occurrence With PraStat and CDC-PRA. 22nd Annual Meeting American Society for Histocompatibility and Immunogenetics, San Diego, California. October 11-16, 1996
21. Miller M, Mather J, Roper L, and Bow L. Development of a Cost Effective HLA Database in Access 2.0. 24th Annual Meeting American Society for Histocompatibility and Immunogenetics. Vancouver, B.C. October, 1998.
22. Bow L, Roper L and Alberghini T. Graft Survival, CREG Match Status, and Antibody Analysis in a Highly Sensitized (PRA 50-99%) Transplant Population. Histocompatibility Technical Workshop, Palm Springs, CA, March, 1999
23. Bow L, Roper L, Alberghini T, Miller M, Michalski P, and Hull D. Graft Survival, CREG Match Status, and Antibody Analysis in a Highly Sensitized (PRA 50-99%) Cadaver Renal Transplant Population. 25th Annual American Society for Histocompatibility and Immunogenetics. New Orleans, LA. October, 1999
24. Miller M, Roper L, Albergini T, Bow L. Comparison of Two ELISA Screening Systems. 25th Annual American Society for Histocompatibility and Immunogenetics. New Orleans, LA. October, 1999
25. Miller M, Roper L, Michalski T, Devivo J, and Bow L. Reduced Incubation Time for AHG Enhanced Crossmatch. 25th Annual American Society for Histocompatibility and Immunogenetics. New Orleans, LA. October, 1999
26. Bow L, Madden R, Miller M, Lipkowitz G. Decellularized Cadaver Vein Allografts Used For Hemodialysis Access Do Not Induce Allosensitization. 16th Annual Clinical Histocompatibility Workshop. Cancun, Mexico. March, 2002
27. Yang X, Hubbard A, Li D, Nightingale C, Langner R, Bow L. Mycophenolic Acid Inhibits Neointimal Growth in the Balloon-Injured Rat Carotid Artery. 3rd Annual Conference on Arteriosclerosis, Thrombosis and Vascular Biology. Salt Lake City, UT. April, 2002

28. Norin A, Glenn K, Bow L, Pancoska C, Eckels D. ASHI Laboratory Survey of Post Transplant Immune Monitoring Practices. 32nd Annual American Society for Histocompatibility and Immunogenetics. Orlando, FL. November 2006
29. Bow L, Miller M, Alberghini T, Hull D, O'Sullivan D, Rewinski M, Lipkowitz G. A Retrospective Analysis of the Clinical Significance of Solid Phase Assay (luminex) Detection of Pre-transplant HLA Antibody as measured by Graft Outcome in Renal Transplant Recipients XXII International Congress of the Transplant Society Vancouver, Canada August 2010
30. Miller M, Alberghini T, Rewinski M, Michalski T, Bow L. Unacceptable Antigens: How Are They Working? 36th Annual American Society for Histocompatibility and Immunogenetics. Hollywood, FL. September 2010
31. Miller M, Alberghini T, Rewinski M, Michalski T, Bow L. Re-Thinking the ROP Trays in Region 1. 36th Annual American Society for Histocompatibility and Immunogenetics Hollywood, FL. September 2010
32. Rewinski M, Miller M, Alberghini T, O'Sullivan D, Bow L. Concordance of Antibody Profile and Crossmatch in Potential Kidney Recipients. 37th Annual American Society for Histocompatibility and Immunogenetics New Orleans, LA October 2011
33. Rewinski M, Miller M, Alberghini T, Bow L, Hull D, Spin Columns Eliminate Interference in Luminex Single Antigen Antibody Assay. 37th Annual American Society for Histocompatibility and Immunogenetics New Orleans, LA October 2011
34. Miller M, Alberghini T, Rewinski M, Bow L. Post-Transplant Detection of a Donor Specific (Epitope) Antibody Resulting in a Positive Flow Crossmatch 37th Annual American Society for Histocompatibility and Immunogenetics New Orleans, LA October 2011

PUBLICATIONS:

1. Schweizer RT, Moore R, Bartus SA, Bow LM and Hayden J, Beta2 Microglobulin Monitoring in Renal Transplant Patients, Microbiology, 1981, American Society for Microbiology, Schlessinger D, p. 252.

2. Schweizer RT, Moore R, Bartus SA, Bow LM and Hayden J, Beta2 Microglobulin Monitoring After Renal Transplantation, Transplantation Proceedings 13(3): 1620-1623, 1981.
3. Schweizer RT, Bow LM, Generas D, Bartus SA, Serologic Considerations in Donor Specific Transfusion Therapy for Kidney Transplantation, Transplantation Proceedings, 14(2): 374-377, 1982.
4. Schweizer RT and Bow LM, Successful Kidney Transplantation After Loss of Specific Anti-Donor HLA Antibodies, Transplantation, 36(6): 731-733, 1983.
5. Bow LM, Schweizer RT and Cho S, Successful Renal Transplantation After Transient Warm B Cell Antibody to Donor Specific Transfusions, Transplantation, 37(6): 618-619, 1984.
6. Sharpe RJ, Schweizer RT, Moore RE, Calaluce RD, Johnson RL, Michalski PA and Bow LM, Cyclosporine Incubated Platelets Retain Function and Release Cyclosporine, Transplantation, 40 (1): 102-104, 1985.
7. Sharpe RJ, Schweizer RT, Krisiunas L and Bow LM, Efficient Production of T Cell Specific Monoclonal Antibodies Through Tolerization to Non-Specific Antigens, Transplantation Proceedings, Vol. XVII, No. 6, 2757, 1985.
8. Schweizer RT, Bartus SA, Rovelli M and Bow LM, Use of Two Donor Specific Transfusions for High Stimulating MLC Living Related Donor Kidney Transplantation, Transplantation, 42: 562-564, 1986.
9. Bow LM and Schweizer RT, Clinically Relevant Factors in Transplantation Immunology, First of Two Parts, Connecticut Medicine, 50: 432-440, 1986.
10. Bow LM and Schweizer RT, Clinically Relevant Factors in Transplantation Immunology, Second of Two Parts, Connecticut Medicine, 50: 497-500, 1986.
11. Bow LM, Roper L, Bartus SA, Hull D and Schweizer RT, Transplantation of Cadaver Kidneys from Pediatric and Older Donors, Transplantation Proceedings, (21)1: 1938-1939, 1989.
12. Bergman, L. Roper, L. Bow, LM, Hull, D, Bartus, SA Schweizer, RT. Late Graft Loss in Cadaveric Renal Transplantation. Transplant Proc 1992 Dec: 24(6):2718-9
13. Perdriest GA, Kaneko H, Buckley TM, Fishman MS, Pleau M, Bow LM, and Schweizer RT, Heat Shock and Recovery Protects Renal Allografts from Warm Ischemic Injury and Enhances HSP72 Production, Transplantation Proceedings, Vol. 25(1): 1670-1673, 1993.

14. Bergmann LS, Roper L, Bow LM, Hull D, Bartus SA, Schweizer RT. Causes of Late Graft Failure in Cadaveric Renal Transplantation. Transplant Proc 1993 Feb; 25 (1 Pt 2): 1340-1.
15. Azrin MA, Mitchel JF, Fram DB, Pedersen CA, Cartun RW, Barry J, Bow LM, Waters DD, McKay RG. Decreased Platelet Deposition and Smooth Muscle Cell Proliferation Following Intramural Heparin Delivery with Hydrogel-coated Balloons. Circulation, 1994; 90:433.
16. Mitchel JF, Azrin MA, Fram DB, Bow LM, Curley TM, Kiernan FJ, Waters DD, Hong MK, Wong SC, Leon MB, Barry JJ, McKay RG. Inhibition of Platelet Deposition and Lysis of Intracoronary Thrombus During Balloon Angioplasty Using Urokinase-coated Hydrogel Balloons. Circulation, 1994; 90:1979-88.
17. Schweizer RT, Bartus SA, Hull D, Perdrizet GA, Swanson M, Low HB, Gallagher R, Dougherty J, Rosson R, Hyams J, D'Avella J, Rasoulpour M, Sullivan P, Bow, L. Organ transplantation at the Hartford Transplant Center. Conn Med 1996 Jul; 60(7):387-93
18. Mitchel JF, Fram DB, Palme DF, Foster R, Hirst JA, Azrin MA, Bow LM, Eldin AM, Waters DD, McKay RG. Enhanced Intracoronary Thrombolysis with Urokinase Using a Novel, Local Drug Delivery System. In-vitro, In-vivo and Clinical Studies. Circulation, 1995;91:785-793.
19. Cyprian O. Onyeji MD, Charles H. Nightingale, PhD, Pamela R. Tessier, Laurine M. Bow, PhD, Activities of Clarithromycin, Azithromycin and Ofloxacin in Combination with Liposomal or Unencapsulated GM-CSF Against Intramacrophage *Mycobacterium Avium-M. Intracellulare*. J Infect Dis, 1995 Sep; 172(3) 810-6.
20. Krause, PJ, Telford S 3rd, Spielman A, Ryan R, Magera J, Rajan TV, Christianson D, Alberghini TV, Bow, L, Persing D. Comparison of PCR with Blood Smear and Inoculation of Small Animals for Diagnosis of *Babesia microti* parasitemia. J Clin Microb 1996 Nov; 34(11):2791-4
21. Chen C, Chen L, Fallon, JT, Ma L, Li L, Bow L, Knibbs D, McKay R, Gillam LD, Waters DD. Functional and Structural Alterations With 24-Hour Myocardial Hibernation and Recovery After Reperfusion - A Pig Model of Myocardial Hibernation. Circulation, 1996:94, No.3:507-516
22. Schweizer, RT, Bartus SA, Hull D, Perdrizet GA, Swanson M, Low, HB, Gallagher R, Dougherty J, Rosson R, Hyams J, D'Avella J, Rasalpour M, Sullivan P, Bow, L. Organ Transplantation at the Hartford Transplant Center. Conn. Med. 60(7): 387-393 1996, July

23. Xuan D, Nicolau DP, Tessier PR, Bow L, Quintiliani R, Nightingale CH. In vitro Reduction of Endotoxin Concentrations with the 5S fragment of Immunoglobulin G. *Antimicrob Agents Chemother* 1997 Jul;41(7):1512-6
24. Joseph F. Mitchel DO; Michael A. Azrin MD; Laurine M. Bow PhD; David D. Waters MD; Raymond G. McKay MD, Localized Delivery of Heparin to Angioplasty Sites with Iontophoresis: Pharmacokinetics and Effect on Platelet Deposition. *Cathet Cardiov Diagn* 1997 Jul; 41(3) 1315-23
25. Mitchel JF, Barry JJ, Bow LM, Alberghini T, Abbas SA, Mckay RG. Local delivery of urokinase with the Channel balloon: Device safety, intracoronary pharmacokinetics, efficacy of thrombolysis. *Cathet Cardiov Diagn* 1997; Jul 41(3): 254-260
26. Mitchel JF, Barry JJ, Bow L, Alberghini TA, Abbas SA, McKay RG. Local Urokinase Delivery With The Channel Balloon: Device Safety, Pharmacokinetics of Intracoronary Drug Delivery, and Efficacy of Thrombolysis. *Cathet Cardiov Diagn*, 1997;41:1-8
27. Mitchel JF, Azrin MA, Fram DB, Bow LM, McKay RG. Localized Delivery of Heparin to Angioplasty Sites with Iontophoresis. *Cathet Cardiov Diagn*, 1997;41(3): 315-323
28. Azrin MA, Mitchel JF, Bow LM, Pedersen CA, Cartun RW, Aretz TH, Waters DD, McKay RG. Local Delivery of C-myb Antisense Oligonucleotides During Balloon Angioplasty. *Cathet Cardiov Diagn*, 1997, 41:232-240
29. Onyeji CO, Nicolau, DP, Nightingale, CH, and Bow, LM. Interferon–gamma Effects on Activities of Gentamycin and Vancomycin against *Enterococcus faecalis* Resistant to the Drugs: An in vitro Study with Human Neutrophils. *Int. J. of Antimicrobial Agents* 11 (1999); 31-37
30. Delmonico FL, Harmon WE, Lorber MI, Goguen J, Mah H, Himmelfarb J, Lipkowitz G, Valliere S, Bow L, Milford EL, Rohrer RJ. A New Allocation Plan for Renal Transplantation. *Transplantation* 1999 Jan 27:67(2):303-9
31. Onyeji CO, Bui KQ, Nicolau DP, Nightingale CH, Bow L, Quintiliani R. Influence of adjunctive interferon-gamma on treatment of gentamicin and vancomycin resistant *Enterococcus faecalis* infection in mice. *Int J Antimicrob Agents* 1999 Aug;12(4):301-9
32. Phillipson SJ, Doyle MA, Nightingale C, Bow L, Mather J, Philipson EH. Effectiveness of a writing improvement intervention program on the readability of the research informed consent document. *J Investig Med* 1999 Nov; 47(9):468-76.
33. Onyeji CO, Nicolau DP, Nightingale CH, Bow L. Modulation of efficacies and pharmacokinetics of antibiotics by granulocyte colony-stimulating factor in neutropenic

mice with multidrug-resistant *Enterococcus Faecalis* infection. J. of Antimicrobial Chemotherapy 2000, 46:429-436.

34. Benedetto B, Lipkowitz G, Madden R, Kurbanov A, Hull D, Miller M, Bow L. Use of cryopreserved cadaveric vein allograft for hemodialysis access precludes kidney transplantation because of allosensitization. J. of Vascular Surgery 2001;33
35. Perez-Escamilla, R, Damio, G, DeJesus, J, Bow, L, Chhabra, J, and Bull, NH. The Connecticut Center of Excellence for Eliminating HealthCare Disparities among Latinos. J. of Higher Education Outreach and Engagement, 2008 (12), #3, 167-176

AWARDS:

2007 Semifinalist for Connecticut Women of Innovation Award, given by the Connecticut Technology Council

PROFESSIONAL ORGANIZATIONS:

- Clinical Research Forum
- Society for Clinical and Translational Science
- International Transplant Society

- American Society of Histocompatibility and Immunogenetics.
Chairperson, 1992 ASHI Northeast Regional Educational Program
Chairperson, 1999 ASHI Northeast Regional Educational Program
- American Transplant Society

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