

CURRICULUM VITAE

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Education:

1972 A.B. (summa cum laude), Princeton University, Princeton, NJ
1976 M.D. Harvard Medical School, Boston, MA

Postdoctoral Training:

1976-1978 Medical House Officer (Intern) and Assistant Resident Physician, Department of Medicine, Peter Bent Brigham Hospital, Boston, MA
1976-1981 Fellow in Medicine, Harvard Medical School
1978-1981 Fellow in Hematology-Medical Oncology, Peter Bent Brigham Hospital (Brigham and Women's Hospital), Boston, MA
1981-1984 Post-Doctoral Fellow, Department of Pathology, Harvard Medical School

Certification and State Licensure:

1979 Diplomate, American Board of Internal Medicine, Certificate No. 073382
1980 Diplomate, American Board of Internal Medicine, Subspecialty Board in Hematology
1981 Diplomate, American Board of Internal Medicine, Subspecialty Board in Medical Oncology
1999 Diplomate, American Board of Pathology, Subspecialty Board in Hematopathology
1977 Physician, Commonwealth of Massachusetts, License Registration No. 42028 (inactive)
1980 Physician, State of New York, Registration No. 144382 (inactive)
1988 Physician, State of Connecticut, License Registration No. 029372

Academic Appointments:

1981-1984 Instructor in Medicine, Harvard Medical School, Boston, MA
1985-1988 Assistant Professor of Medicine, Harvard Medical School
1989-1993 Associate Professor of Laboratory Medicine, Internal Medicine and Pediatrics, Yale University School of Medicine, New Haven, CT
1993-1995 Associate Professor (with tenure) of Laboratory Medicine, Internal Medicine and Pediatrics, Yale
1996-present Professor of Laboratory Medicine, Internal Medicine and Pediatrics, Yale
1996-2004 Member, Bioengineering Program, Yale University
1997 Acting Chair, Department of Laboratory Medicine, Yale (during Chair's sabbatical)
1997-2006 Vice Chair, Department of Laboratory Medicine, Yale
2001-present Director, Immunohematology Post-Doctoral Research T32 Training Program, Yale
2001-present Director, Hematopathology Fellowship, Departments of Pathology and Laboratory Medicine, Yale-New Haven Hospital and Yale University School of Medicine
2006-present Chair, Department of Laboratory Medicine, Yale
2012-present Professor of Biomedical Engineering

Hospital Appointments:

1980-1988	Associate in Medicine (Staff Physician), Brigham and Women's Hospital, Boston, MA
1981-1988	Associate in Medicine (Attending in Hematology-Oncology), Children's Hospital Medical Center, Boston, MA and Associate Physician (Attending), Dana-Farber Cancer Institute, Boston, MA
1982-1985	Associate Medical Director, Bone Marrow Transplantation Immunology Laboratory, Children's Hospital and Dana-Farber Cancer Center, Boston, MA
1983-1988	Attending Physician, Department of Medicine, Veterans Administration Medical Centers at West Roxbury and Brockton, MA
1984-1988	Hematology Clinic Co-Director, Hematology Division, Brigham and Women's Hospital
1986-1988	Associate Medical Director, Hematology & Flow Cytometry Laboratories, Brigham & Women's Hospital
1988-present	Attending Physician, Departments of Laboratory Medicine, Internal Medicine (Hematology; Oncology; Stem Cell Transplant) and Pediatrics, Yale-New Haven Hospital, New Haven, CT
1989-present	Associate Director, Hematology Laboratory, Yale-New Haven Hospital
1991-present	Attending Physician, Department of Pathology & Laboratory Medicine, and Department of Medicine, Veterans Administration Connecticut Medical Center, West Haven, CT
1991-present	Director, Immunology and Flow Cytometry Laboratories, Yale-New Haven Hospital
1995-present	Director, Molecular Diagnostics Laboratory, Yale-New Haven Hospital
1997-2006	Assistant Chief of Laboratory Medicine Service, Yale-New Haven Hospital
1998-2010	Teaching Attending Physician, Department of Medicine, Bridgeport Hospital, Bridgeport, CT
2000-present	Attending Pathologist, Dept of Pathology & Laboratory Medicine, Bridgeport Hospital
2006-present	Chief, Department of Laboratory Medicine, Yale New Haven Hospital
2010-present	Director, Clinical Laboratories at Smilow Cancer Centers

Honors and Awards:

1972	George A. Howe Prize in Analytical Chemistry, Princeton University
1972	Phi Beta Kappa
1972	A.B. Degree Summa Cum Laude, Princeton University
1972	Sigma Xi
1976	Alpha Omega Alpha
1981-1984	Junior Clinical Faculty Fellowship, American Cancer Society
1982-1989	Fellow and Special Fellow, Leukemia Society of America
1989	Fellow, American College of Physicians
1989-1994	Scholar, Leukemia Society of America
1992	DeCamp Lecturer on Biomedical Ethics, Princeton University
1993	Stohlman Scholar, Leukemia Society of America
1996	National Blood Foundation Scholar
1997	Master of Arts degree <i>privatim</i> , Yale University (honorary)
1999	Fellow, College of American Pathologists
2008-present	Visiting Professorships: Albert Einstein College of Medicine, Harvard Medical School / Brigham & Women's Hospital, University of Pennsylvania, Pennsylvania State University, Washington University, University of Washington, Columbia University
2007-2008	President (elected), Academy of Clinical Laboratory Physicians and Scientists
2010	Evans Award for Outstanding Contributions to Laboratory Medicine, Academy of Clinical Laboratory Physicians and Scientists
2010-2013	Chair (elected), Research Committee, Association of Pathology Chairs
2011	Teaching Award, Yale Residency Program

Committees/Boards:

National:

1989-1991	Chair, American Society of Hematology Education Program on Bone Marrow Transplantation
1989	Chair, FASEB Summer Research Conference on Cellular and Molecular Studies in Bone Marrow Transplantation

1992-1997 Member, National Institutes of Health Recombinant DNA Advisory Committee (RAC)
1992-1995 Member, American College of Physicians, Education Subcommittee on Hematology for MKSAP X
1993-1997 Chair, Working Group on Data Management, NIH Recombinant DNA Advisory Committee
1995-1999 Member, Scientific Subcommittee on Clinical Laboratory Hematology, American Society of Hematology
1997-1999 Member, Medical Coding and Reimbursements Committee, American Association of Blood Banks
1998-2002 Member, National Space Biomedical Research Institute Research Board
1999-2001 Member and Co-Chair, American Heart Association Grant Review Study Section on Cell Biology, Metabolism, Immunology & Microbiology Northeast 4
1998-2002 Member, American College of Physicians—ASIM Continuing Education Faculty
1999-2001 Member, Veteran’s Administration Merit Review Board Ad Hoc Reviewer
2000-2003 Member, Executive Committee, Academy of Clinical Laboratory Physicians and Scientists
1994-present College of American Pathologists Inspection Team Member
2002-2004 Chair, American Heart Association Study Section on Cell Biology, Metabolism, Immunology & Microbiology, Northeast 4
2002-2006 Consultant, Nevada Cancer Institute
2002-2004 Member, NIH Study Section, Surgery and Bioengineering
2003-2005 Consulting Reviewer, Medical Research Council, Great Britain
2003-2005 Temporary Member, NIH Special Emphasis Panel on Hematology Training Programs (T32) and on Mentored Clinical Scientist Development Awards
2003-2007 Co-Chair, American Society of Clinical Pathology Resident In-Service Examination Committee
2003-2006 Chair, Clinical Pathology Curriculum Development Committee, Academy of Clinical Laboratory Physicians and Scientists (ACLPS)
2004-2006 Member, NCI Special Emphasis Panel, Innovative Cancer Diagnostics
2004-2010 Co-Chair and Member, American Heart Association National Study Section on Bioengineering and Biotechnology
2004-2007 Member, American Heart Association Northeast Consortium Peer Review Steering Committee
2006-2011 Member, NIH NHLBI Study Section on Institutional Training Mechanisms
2007 Member, NIH Special Emphasis Panel Transfusion/Hemostasis Clinical Trials Network
2007-2013 Member, Association of Pathology Chairs Undergraduate Medical Education Committee
2009-2011 Member, American Heart Association Scientific Task Force
2009-2013 Member, Scientific Advisory Board, Generation Health, Inc
2009-2016 Member, Centers for Disease Control (CDC) Clinical Laboratory Integration into Healthcare Collaborative (CLIHC)
Chair, CLIHC Subcommittee on Laboratory Medicine Education
2010-2012 Member, Alliance for Academic Internal Medicine Physician Scientist Initiative
2010-2013 Member, College of American Pathologists Transformation Steering Group
2010-2013 Chair, Association of Pathology Chairs Ad Hoc Committee on Physician-Scientists
2010-2013 Chair (elected), Research Committee, Association of Pathology Chairs
2012-present Member, Grant Review for Pennsylvania Dept of Health Awards
2013-present Member, Clinical Advisory Board, Avalon Health Services, LLC
2013-present Member, Practice & Management Committee, Research Committee, Advocacy Committee, Association of Pathology Chairs
2012, ’13, ’14 Chair, NIH NHLBI Ad Hoc Study Section on Benign Hematology / Transfusion Training Mechanisms
2016 Chair, NIH NHLBI K12 Ad Hoc Study Section
2016 Member, NIH Ad Hoc Committee on Research in Residency

Regional:

1988-1994 Member, Advisory Committee, Aplastic Anemia Foundation, New England Region
1991-1995 Member, Board of Trustees, Leukemia Society of America, Central Connecticut Chapter
1995-2000 Member, Medical Advisory Board, Leukemia Society of America, Central Connecticut Chapter
2008-2009 Member, Pathology Chairman Search Committee, Hospital of St Raphael, New Haven, CT

2001-2012 Member, Board of Trustees, Richard D. Frisbee III Foundation

Local (2005-present only)

1995-2012 Member, Yale University Biosafety Committee (IBC) Human Gene Therapy Subcommittee
2006-2007 Chair, Yale Medical School LCME Committee on Governance
2007-2008 Member, Yale University Budget and Finance Committee
2008-2012 Member, Dean's Committee on Sexual Harassment
2009-2011 Chair, Yale Medical Group Finance Committee
2010-2011 Chair, Search Committee for Chair of Yale Pediatrics
2013-2016 Chair, Search Committee for Chair of Yale Internal Medicine
2014-present Chair, Clinical Research Technology Committee, Yale
2014-2016 Chair, Education Committee, YSM (LCME Re-accreditation)
2014-2016 Member, LCME Institutional Self-Study Task Force
2014-2016 Member, Gender Equity Task Force, Yale School of Medicine
2016-present Chair, Clinician-Educator Track Task Force

Principal Editorial Responsibilities:

2003-present Editorial Board, *Transfusion*
2015-present Editorial Board, *Academic Pathology*

Community Service Activities

2001-2003 Vice-Chair, Board of Trustees, Our Lady of Mercy School, Madison, CT
1995-present Honorable Order of Kentucky Colonels
2001-2012 Member, Board of Trustees, Richard D. Frisbee III Foundation, New Canaan, CT

BIBLIOGRAPHY

1. Adelman BA, Bentman A, Rosenthal P, Smith BR, Bridges KR, Holmes W. 1979. Treatment of Aspergillosis in Leukemia. *Ann Int Med* 91:323-324.
2. Ault KA, Smith BR, Holmberg LA. 1980. Proliferation of T Gamma Cells with Natural Killer Activity in Patients with Neutropenia (letter). *N Engl J Med* 303:881-882.
3. Smith BR, Ault KA. 1981. Increase of Surface Ia-like Antigen Expression on Human Monocytes Independent of Antigenic Stimuli. *J Immunol* 127:2020-2027.
4. Bloch DB, Smith BR, Ault KA. 1983. Cells-on-Microspheres: A New Technique for Flow Cytometric Analysis of Adherent Cells. *Cytometry* 3:449-452.
5. Smith BR, Robert NJ, Ault KA. 1983. In Waldenstrom's Macroglobulinemia the Quantity of Detectable Circulating Monoclonal B Lymphocytes Correlates with Clinical Course. *Blood* 61:911-914.
6. Rappeport JM, Smith BR, Parkman RP, Rosen FS. 1983. Application of Bone Marrow Transplantation in Genetic Diseases. *Clin Hematol* 12:755-773.
7. Parkman RP, Rappeport JM, Hellman S, Lipton J, Smith BR, Geha R, Nathan DG. 1984. Busulfan and Total Body Irradiation as Anti-hematopoietic Stem Cell Agents in the Preparation of Patients with Congenital Bone Marrow Disorders for Allogeneic Bone Marrow Transplantation. *Blood* 64:852-857.
8. Smith BR, Weinberg DS, Robert NJ, Towle M, Luther E, Pinkus GS, Ault KA. 1984. Circulating Monoclonal B Lymphocytes in Non-Hodgkin's Lymphoma. *N Engl J Med* 311:1476-1481.

9. First L, Smith BR, Lipton J, Nathan DG, Parkman RP, Rapoport JM. 1985. Isolated Thrombocytopenia Following Allogeneic Bone Marrow Transplantation: Existence of Transient and Chronic Thrombocytopenia Syndromes. *Blood* 65:368-374.
10. Ginsburg D, Antin JH, Smith BR, Orkin SH, Rapoport JM. 1985. Origin of Cell Populations Following Bone Marrow Transplantation: Analysis Using DNA Sequence Polymorphisms. *J Clin Invest* 75:596-603.
11. Smith BR, Parkman RP, Nathan DG, Lipton J, Rapoport JM. 1985. Efficacy of Short Course (Four Dose) Methotrexate Following Bone Marrow Transplantation for Prevention of Graft versus Host Disease. *Transplantation* 39:326-329.
12. Smith BR, Rosenthal DS, Ault KA. 1985. Natural Killer Lymphocytes in Hairy Cell Leukemia: Presence of Phenotypically Identifiable Cells with Defective Functional Activity. *Exptl Hematol* 13:189-193.
13. Karp DD, Parker LM, Binder N, Tantravehi R, Smith BR, Erwin T, Canellos GP. 1985. Treatment of Blastic Transformation of Chronic Granulocytic Leukemia using High Dose BCNU and Cryopreserved Autologous Peripheral Blood Stem Cells. *Am J Hematol* 18:243-249.
14. Murphy GF, Merot Y, Tong AKF, Smith BR, Mihm MC. 1985. Depletion and Repopulation of Epidermal Dendritic Cells After Allogeneic Bone Marrow Transplantation in Humans. *J Invest Dermatol* 84:210-214.
15. Ault KA, Antin JH, Ginsburg D, Orkin SH, Rapoport JM, Keohan ML, Martin P, Smith BR. 1985. Phenotype of Recovering Lymphoid Cell Populations Following Marrow Transplantation. *J Exp Med* 161:1483-1502.
16. Smith BR, Parkman RP, Levey R, Nathan DG, Rapoport JM. 1985. Efficacy of a Cyclophosphamide-Procarbazine-AntiThymocyte Serum Regimen for Prevention of Graft Rejection following Marrow Transplantation of Transfused Patients with Aplastic Anemia. *Transplantation* 39:671-673.
17. Bridges KB and Smith BR. 1985. Discordance of Transferrin Receptor Expression and Susceptibility to Lysis by Natural Killer Cells. *J Clin Invest* 76:913-918.
18. Antin JH, Ginsburg D, Smith BR, Nathan DG, Orkin SH, Rapoport JM. 1985. Bone Marrow Transplantation for Paroxysmal Nocturnal Hemoglobinuria: Eradication of the PNH Clone and Documentation of Complete Lympho-Hematopoietic Engraftment. *Blood* 66:1247-1250.
19. Louie EK, Ault KA, Smith BR, Hardman EL, Quesenberry PJ. 1985. IgG-mediated Haemolysis Masquerading as Cold Agglutinin Induced Anaemia complicating severe infection with Mycoplasma Pneumonia. *Scand J Haematol* 35:264-269.
20. Smith BR, Ault KA. 1985. Circulating Monoclonal B Lymphocytes in Non-Hodgkin's Lymphoma. In: Hickey RC (ed) "1985 Yearbook of Cancer" (Chicago: Yearbook Medical Publishers) pp. 142-5.
21. Antin JH, Smith BR, Ewenstein BM, Arceci RJ, Lipton JM, Page PL, Rapoport JM. 1986. HTLV III Infection after Bone Marrow Transplantation. *Blood* 67:160-163.
22. Rozans MK, Smith BR, Burakoff SJ, Miller RA. 1986. Long-lasting Deficit of Functional T Cell Precursors in Human Bone Marrow Transplant Recipients Revealed by Limiting Dilution Methods. *J Immunol* 136:4040-4048.
23. Patenaude AF, Rapoport JM, Smith BR. 1986. The Physician's Influence on Informed Consent for Bone Marrow Transplantation. *Theoret Medicine* 7:165-179.

24. Fox DA, Faix JD, Coblyn J, Fraiser P, Smith BR, Weinblatt ME. 1986. Thrombotic Thrombocytopenic Purpura and Systemic Lupus Erythematosus. *Ann Rheum Dis* 45:319-322.
25. Rozans MK, Smith BR, Emerson SE, Crimmins M, Laurent G, Reichert T, Burakoff SJ, Miller RA. 1986. Functional Assessment of T Cell Depletion from Marrow, Prior to Therapeutic Transplant, Using Limiting Dilution Culture Methods. *Transplantation* 42:380-387.
26. Fox DA and Smith BR. 1986. Evidence for Oligoclonal B Cell Expansion in the Peripheral Blood of Patients with Rheumatoid Arthritis. *Ann Rheum Dis* 45:991-995.
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37. Strair RK, Towle M, Smith BR. 1988. Recombinant Retroviruses Encoding Cell Surface Antigens as Selectable Markers. *J Virol* 62:4756-4759.

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41. Bierer BE, Burakoff SJ, Smith BR. 1989. A Large Proportion of T Lymphocytes Lack CD5 Expression Following Bone Marrow Transplantation. *Blood* 73:1359-1366.
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45. Guinan EC, Smith BR, Doukas JT, Miller RA, Pober JS. 1989. Vascular Endothelial Cells Enhance T Cell Responses by Markedly Augmenting IL-2 Concentrations. *Cellular Immunology* 118:166-177.
46. Melton LB, Lakkis F, Moscovitch-Lopatin M, Smith BR, Williams JM, Rosoff PM, Strom TB. 1989. Antibody Valence and Induced Signal Transduction: The Role of Antibody Valence in Anti-CD3 Induced Signal Transduction in Isolated Normal T Cells. *Clin Immunol Immunopath* 50:171-183.
47. Wheeler C, Antin JH, Churchill WH, Smith BR, Bublely GJ, Come SE, Rosenthal DS, Rapoport JM, Ault KA, Schnipper LE, Eder PJ. 1989. Escalating Dose Cyclophosphamide, BCNU, and VP-16 with Autologous Bone Marrow Transplantation in Relapsed Hodgkin's and Non-Hodgkin's Lymphoma. In: Dicke KA, Spitzer G, Jagannath S, Evinger-Hodges MJ (eds). "Autologous Bone Marrow Transplantation" (Houston, Univ. of Texas), pp 311-315.
48. Mitus AJ, Stein RS, Rapoport JM, Antin JH, Weinstein HJ, Alper CA, Smith BR. 1989. Monoclonal and Oligoclonal Gammopathy After Bone Marrow Transplantation. *Blood* 74:2764-2768.
49. Niemeyer CM, Sieff CA, Smith BR, Ault KA, Nathan DG. 1989. Hematopoiesis In Vitro Co-exists with Natural Killer Lymphocytes. *Blood* 74:2376-2382.
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51. Smith BR, Armitage JO, McCullough J, O'Reilly RJ. 1989. Bone Marrow Transplantation -Choosing Between Autologous, Unrelated Allogeneic, and Haploidentical Transplants. In: "Hematology, 1989: The Education Program of The American Society of Hematology" (ASH: 1989), pp 81-86.

52. Antin JH, Bierer BE, Smith BR, Guinan EC, Provost MM, Ferrara J, Macklis RM, Tarbell NJ, Blythman H, Bouloux C, Ziniti LM, Bogart RE, Burakoff SJ, Weinstein HJ. 1990. Depletion of Bone Marrow T Lymphocytes with an Anti-CD5 Monoclonal Immunotoxin (ST1-Immunotoxin): Effective Prophylaxis for Graft versus Host Disease. In: Gross S, Gee AP, Worthington-White DA (eds). "Bone Marrow Purging and Processing" (New York: Wiley-Liss) Prog Clin Biol Res 333:207-215.
53. Wheeler C, Antin JH, Churchill WH, Come SE, Smith BR, Bublely GJ, Rosenthal DS, Rapoport JM, Ault KA, Schnipper LE, Eder JP. 1990. Cyclophosphamide, Carmustine, and Etoposide with Autologous Bone Marrow Transplantation in Refractory Hodgkin's Disease and Non-Hodgkin's Lymphoma: A Dose-Finding Study. J Clin Oncol 8:648-656.
54. Strair RK, Towle M, Heald P, Smith BR. 1990. Retroviral Mediated Transfer and Expression of Exogenous Genes in Primary Lymphoid Cells: Assaying for a Viral Transactivator Activity in Normal and Malignant Cells. Blood 76:1201-1208.
55. Strair RK, Towle M, Smith BR. 1990. Retroviral Mediated Gene Transfer into Bone Marrow Progenitor Cells: Use of Beta-Galactosidase as a Selectable Marker. Nuc Acids Res 18:4759-62.
56. Smith BR. 1990. Regulation of Hematopoiesis. Yale J Med Biol 63:371-380.
57. Smith BR. 1990. "Overview of Bone Marrow Transplantation: 1990". In: Kasprisin CA, Snyder EL (eds), "Bone Marrow Transplantation" (Arlington, VA: AABB), pp 1-22.
58. Smith BR, Leitman S, Finberg R. 1990. Bone Marrow Transplantation: Diagnosis and Management of GVHD and Acute Infection. In: "Hematology, 1990: The Education Program of the American Society of Hematology" (ASH: 1990), pp 89-95.
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60. Snyder EL, Beardsley DS, Smith BR, Horne W, Johnson R, Wooten T, Napychank PA, Male P, Buchholz DH. 1991. Storage of Platelet Concentrate After High Dose UV-B Irradiation. Transfusion 31:491-496.
61. Antin JH, Bierer BE, Smith BR, Ferrara J, Guinan EC, Sieff C, Macklis RM, Tarbell NJ, Lynch E, Reichert T, Blythman H, Bouloux C, Rapoport JM, Burakoff SJ, Weinstein HJ. 1991. Selective Depletion of Bone Marrow T-Lymphocytes with Anti-CD5 Monoclonal Antibodies: Effective Prophylaxis for Graft-versus-Host Disease in Patients with Hematologic Malignancies. Blood 78:2139-2149.
62. Rinder CS, Mathew J, Rinder H, Bonan J, Ault K, Smith BR. 1991. Modulation of Platelet Surface Adhesion Receptors During Cardiopulmonary Bypass. Anesthesiology 75:563-570.
63. Rinder HM, Bonan J, Rinder CS, Ault KA, Smith BR. 1991. Activated and Unactivated Platelet Adhesion to Monocytes and Neutrophils. Blood 78: 1760-1769.
64. Rinder HM, Bonan J, Rinder CS, Ault KA, Smith BR. 1991. Dynamics of Leukocyte-Platelet Adhesion in Whole Blood. Blood 78:1730-1737.
65. Berliner N, Smith BR. 1991. The Pathobiology of Lymphoproliferative Disease. In: Hoffman R, Benz EJ, Shattil SJ, Furie B, Cohen HJ (eds): "Hematology: Basic Principles and Practice" (New York: Churchill Livingstone), pp. 897-912.

66. Smith BR. 1991. Use of Erythropoietin in Acquired Immunodeficiency Syndrome and Hematologic Disorders. *Hosp Formulary* 26:655-661.
67. Smith BR, Hansen JA, Rapoport JM. 1991. Bone Marrow Transplantation: Selecting Donors and Diseases. In: "Hematology, 1991: The Education Program of the American Society of Hematology" (ASH:1991), pp 104-111.
68. Smith BR. 1992. Can Medical Rationing Be Made Rational? *Arch Int Med* 152:476-477.
69. Macklis RM, Mauch PM, Burakoff SJ, Smith BR. 1992. Lymphoid Irradiation Results in Long Term Increases in Natural Killer Cells in Patients Treated for Hodgkin's Disease. *Cancer* 69:778-783.
70. Maziarz RT, Arceci RJ, Bernstein SC, Tantravehi R, Smith BR, Kasai M, Strominger JL. 1992. A Gamma-Delta T Cell Leukemia Bearing a Novel Variant t (8;14) (q24;q11) Translocation Demonstrates *In Vitro* Lymphocyte Activated Killing. *Blood* 79:1523-1531.
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72. Wiebe V, DeGregorio MW, Smith BR, Rapoport JM. 1992. Pharmacology of Agents Used in Bone Marrow Transplant Conditioning Regimens. *Critical Reviews in Oncology/Hematology* 13:241-270.
73. Smith BR. 1993. Qualitative versus Quantitative Immunophenotyping. *Annals of the New York Academy of Sciences* 677:152-154.
74. Rinder HM, Munz U, Ault KA, Bonan JL, Smith BR. 1993. Reticulated Platelets in the Evaluation of Thrombopoietic Disorders. *Arch Pathol Lab Med* 117:606-610.
75. Smith BR. 1993. Integrating Flow Cytometry into the Hematology Laboratory: A Curmudgeon's View. *Annals of the New York Academy of Sciences* 677:326-333.
76. Bonan JL, Rinder HM, Smith BR. 1993. Determination of the Percentage of Thiazole Orange (TO) Positive "Reticulated" Platelets Using Autologous Erythrocyte TO Fluorescence as an Internal Standard. *Cytometry* 14:690-694.
77. Rinder HM, Snyder EL, Bonan JL, Napychank PA, Malkus H, Smith BR. 1993. Platelet Activation in Stored Platelet Concentrates: Correlation Between Membrane Expression of P-selectin, gpIIb/IIIa, and β -thromboglobulin Release. *Transfusion* 33:25-29.
78. Macklis RM, Mauch PM, Thompson L, Burakoff SJ, Smith BR. 1993. Phenotypic and Functional Analysis of Expanded Natural Killer Cell Subpopulations in Hodgkin's Disease Patients Treated with Lymphoid Irradiation. *Oncology* 50:323-328.
79. Rinder CS, Student LA, Bonan JL, Rinder HM, Smith BR. 1993. Aspirin does not inhibit ADP-induced Platelet - granule Release. *Blood* 82:505-512.
80. Rinder CS, Gaal D, Student LA, Smith BR. 1994. Platelet-Leukocyte Activation and Modulation of Adhesion Receptors in Pediatric Patients with Congenital Heart Disease undergoing Cardiopulmonary Bypass. *J Thorac Cardiovasc Surg* 107:280-288.
81. Rinder HM, Bonan JL, Anandan S, Rinder CS, Rodrigues PA, Smith BR. 1994. Non-invasive Measurement of Platelet Kinetics in Normal and Hypertensive Pregnancies. *Am J Obs Gynecol* 170:117-122.

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Submitted

177. Griffin MJ, Rinder CS, Smith BR, Poulton JS, Rinder HM. Decreased shear-dependent platelet function correlates with bleeding and therapeutic response to platelet transfusion following cardiopulmonary bypass. (submitted)
178. Rinder HM, Rinder CS, Smith BR. Heme Oxygenase is upregulated by Shear Stress and by Simulated Extracorporeal Circulation. (submitted).

RESEARCH SUPPORT

Ongoing Research Support:

1-T32-HL07974-14 Smith, BR (PI) 05/01/2012-04/31/2017
NIH/NHLBI

Immunohematology/Transfusion Medicine Research Training

This is a post-doctoral training grant in the broad field of Immunohematology and Transfusion Medicine.

Role: PI

No number. Smith, BR (PI) 06/01/2014-05/31/2018

Boehringer-Ingelheim Pharmaceuticals

Syk Pathways in Platelet Activation via Hematopoietic Cell-Cell Interactions

The goal of this project is to understand the effects of cell-cell adhesion on syk activation pathways.

Role: PI

AMG RFP 1105. Smith, BR (PI) 10/01/2012-09/30/2016

Academic Mission Group of the Association of Pathology Chairs

Laboratory Medicine Education in Medical Schools

The goals of this project are to comprehensively assess the status of Laboratory Medicine in US Medical Schools and to enhance training in this area.

Role: PI

NHLBI HHSN268201100006I. Snyder, EL (PI) 03/15/2011-03/14/2018

NIH/NHLBI

Recipient Epidemiology and Donor Evaluation Study-III (REDS-III)

The goal of this project is to participate as a domestic hub in the REDS III consortium. The proposal combines the resources of a large, nationally recognized tertiary care hospital (Yale-New Haven Hospital), a large, ethnically

diverse community hospital (Bridgeport), and a large blood center (American Red Cross, Connecticut Region).
Role: Co-Investigator

1U54DK106857-01. Krause, DS (PI) 08/01/2015-07/31/2020

NIH/NIDDK

Yale Cooperative Hematology Specialized Core Center

The goal of this project is to facilitate and enhance hematology research by providing investigators access to state-of-the-art technologies via both performance and teaching-based approaches.

Role: Co-Investigator

Recently Completed Research Support:

No number. Smith, BR (PI) 07/01/2011-06/30/2015

American Society of Hematology

Alternative Training Pathway Development

Adult/Pediatric Transfusion Medicine and Coagulation Fellowship

The goal of this project is to develop a training program for a recognized gap in physician-scientist education, that is, internal medicine and pediatric hematology training program graduates who desire special expertise in the science and medicine of Transfusion Medicine and Coagulation.

Role: PI