

BARRY S. COLLER, MD

On September 1, 2001, Barry S. Collier, M.D. became the David Rockefeller Professor of Medicine; Head, Laboratory of Blood and Vascular Biology; Physician-in-Chief of The Rockefeller University Hospital; and Vice President for Medical Affairs at The Rockefeller University. He also serves as the founding Director of the Rockefeller University Center for Clinical and Translational Science and the Principal Investigator of the University's Clinical and Translational Science Award (CTSA) from the National Center for Research Resources of the National Institutes of Health. From 1993 to 2001, Dr. Collier was the Murray M. Rosenberg Professor of Medicine and Chairman of the Samuel Bronfman Department of Medicine at Mount Sinai School of Medicine in New York City, as well as Chief of the Medical Service of the Mount Sinai Hospital, a component of The Mount Sinai-NYU Medical Center and Health System. Dr. Collier received his B.A. degree, magna cum laude from Columbia College in 1966, and his M.D. from New York University School of Medicine in 1970. He completed his residency in internal medicine at Bellevue Hospital in New York City and advanced training in hematology and clinical pathology at the National Institutes of Health. He joined the faculty at Stony Brook in 1976 as an Assistant Professor of Medicine in the Division of Hematology. During his years at Stony Brook he was the Clinical Director and Head of the Hematology Division, a consulting physician at the Northport VA Medical Center, Clinical Chief of the University Hospital Hematology Laboratory, a Director of the LI High Technology Incubator, a Director of the Stony Brook Foundation, and Associate Director for Biomedical Research of the Biotechnology Center for Advanced Technology. In 1982 Dr. Collier became Professor of Medicine and Pathology at Stony Brook. He was awarded the title of Distinguished Service Professor of Medicine and Pathology at Stony Brook in 1993.

Dr. Collier is a member of Phi Beta Kappa, Alpha Omega Alpha, the American Society for Clinical Investigation, the Association of American Physicians, the Institute of Medicine of the National Academies, and the National Academy of Sciences. He is a Fellow of the New York Academy of Medicine, the American Association for the Advancement of Science, and the American Academy of Arts & Sciences, and a Master of the American College of Physicians.

Dr. Collier served as President of the American Society of Hematology in 1997-1998, and currently serves as the founding President of the Society for Clinical and Translational Science, and as a member of the Advisory Council of the National Heart, Lung and Blood Institute and the national Principal Investigators' CTSA Consortium Steering Committee.

Dr. Collier's research interests have focused on hemostasis and thrombosis, in particular platelet physiology. He developed a monoclonal antibody that inhibits platelet function and a derivative of that antibody (abciximab; ReoPro™; Centocor/Eli Lilly) was approved for human use

by the FDA in 1994. It is now in clinical use throughout the United States, Europe, Scandinavia, Australia, and portions of Asia, to prevent ischemic complications of percutaneous coronary interventions such as angioplasty and stent insertion. More than 4.0 million patients have been treated with abciximab. He also developed an assay to assess platelet function, and automated derivatives of that assay to monitor therapy with abciximab, aspirin, and clopidogrel (Plavix™) have been approved for human use by the FDA (VerifyNow; Accumetrics). Dr. Collier is the recipient or a co-recipient of fourteen U.S. patents.

Dr. Collier's awards include:

- John Simon Guggenheim Memorial Foundation Fellow, 1982
- The International Investigator Recognition Award for Contributions to Hemostasis from the International Society on Thrombosis and Haemostasis, 1987
- National Heart Lung and Blood Institute MERIT Grant, 1989-1999
- c7E3 Fab (abciximab; ReoPro™) named 1995 Best New Therapeutic Product by the Biotechnology Industry Organization and Innovation of the Year by Pharmazeutische Zeitung
- 1997 Inventor of the Year, The New York Intellectual Property Law Association
- 1997 International Society on Thrombosis and Haemostasis Distinguished Career Award
- 1998 American Heart Association National Research Achievement Award (Co-recipient with Dr. Oliver Smithies)
- 1998 Jacobi Medallion, Mount Sinai Alumni Association
- 2001 Bugher Foundation Award for Achievement in Cardiovascular Science and Medicine, The New York Chapter of the American Heart Association
- 2001 Alexander Richman Award for Humanism in Medicine, Mount Sinai School of Medicine
- 2001 Warren Alpert Foundation Award (Co-recipient with Dr. Eugene Braunwald), Harvard Medical School
- 2002 Honorary Doctor of Science, Mount Sinai School of Medicine
- 2003 Honorary Doctor of Science, State University of New York at Stony Brook School of Medicine
- 2005 Robert J. and Claire Pasarow Foundation Award for Cardiovascular Research
- 2005 Henry M. Stratton Medal, American Society of Hematology
- 2007 Honorary Doctor of Science, North Shore-LIJ Graduate School of Molecular Medicine

CURRICULUM VITAE

NAME: Barry Spencer Coller

DATE OF BIRTH: November 21, 1945

MARITAL STATUS: Married 2 children

HOME ADDRESS: 1160 Park Avenue, Apt. 6A
New York, New York 10128

EDUCATION:

1962-1966 B.A. Columbia College, Magna cum laude
1966-1970 M.D. New York University School of Medicine

TRAINING:

1970-1971 Straight Medical Intern, Bellevue Hospital, N.Y.C.
1971-1972 Resident in Medicine, Bellevue Hospital, N.Y.C.
1972-1974 Clinical Associate, Hematology Service, Clinical Pathology
Department, NIH, Bethesda, MD

SPECIALTY CERTIFICATION:

Diplomate American Board of Internal Medicine, June 1973
Diplomate Hematology Subspecialty, American Board of
Internal Medicine, October 1974
Diplomate American Board of Pathology, Hematology
Subspecialty, May 1975

CURRENT POSITIONS:

2001- David Rockefeller Professor of Medicine
Head, Allen and Frances Adler Laboratory of Blood and Vascular Biology
Vice President for Medical Affairs
Director, Center for Clinical and Translational Science
The Rockefeller University
1230 York Avenue
New York, NY 10021

Physician-in-Chief
The Rockefeller University Hospital
New York, NY

Clinical Professor of Medicine
Mount Sinai School of Medicine

Revised: November 2, 2011
CURRENT POSITIONS: (continued)

Adjunct Professor of Medicine
S.U.N.Y. at Stony Brook

PREVIOUS POSITIONS:

19932001 Murray M. Rosenberg Professor of Medicine and
Chairman, The Samuel Bronfman Department of Medicine
Mount Sinai School of Medicine, New York, NY
Director and Chief of Medicine
Mount Sinai Hospital, New York, NY

1993 Distinguished Service Professor
Health Sciences Center
S.U.N.Y. at Stony Brook

19821993 Professor of Medicine and Pathology
Health Sciences Center
S.U.N.Y. at Stony Brook

19841993 Head, Hematology Division
Department of Medicine
S.U.N.Y. at Stony Brook

19921993 Associate Director for Biomedical Research
Biotechnology Center for Advanced Technology
S.U.N.Y. at Stony Brook

19761993 Clinical Chief, Hematology Laboratory,
S.U.N.Y. at Stony Brook

19761993 Consulting Physician
Northport Veterans Administration Medical Center
Northport, NY

19781982 Associate Professor of Medicine and Pathology
Health Sciences Center, S.U.N.Y. at Stony Brook

19781983 Clinical Director, Hematology Division
Department of Medicine, S.U.N.Y. at Stony Brook

19761978 Assistant Professor of Medicine, Health Sciences Center
S.U.N.Y. at Stony Brook

19741976 Staff Physician, Hematology Service,
Clinical Pathology Dept., NIH Bethesda, MD

19731976 Attending Physician, Molecular Hematology Branch,
National Heart and Lung Inst., NIH Bethesda, MD

19721974 Clinical Associate, Hematology Service,
Clinical Pathology Department, NIH Bethesda, MD

19721976 Clinical Instructor in Medicine, Georgetown Univ.
School of Medicine, Washington, D.C.

19711972 Teaching Assistant in Medicine, N.Y.U. School of
Medicine, New York, New York

MILITARY:

19721976 Surgeon USPHS, National Inst. of Health, Bethesda, MD

HONORS RECEIVED:

College:

James Gordon Bennett Prize for Political Science

Medical School:

Mosby Book Award for Scholarship
Maurice Freiman Memorial Prize for exemplary and outstanding work

Medical School: (continued)

Solomon and Dora Monness Shapiro Prize for general excellence based on

scholarship, personality and character
Alpha Omega Alpha Prize for the highest scholastic rankings in the four-year
course (one of three recipients)
New York University Founder's Day Award for outstanding scholastic
Achievement

Professional:

Honorary Lectureships and Visiting Professorships:

1986 Anna and Leo Roon Lecturer, Scripps Clinic and Research Foundation,
La Jolla, CA.
1991 Martin Rosenthal Lecturer, Mount Sinai Hospital, New York
1992 Merrill Lipsey Visiting Professor, Cornell University College of Medicine
1994 Visiting Professor, University of Nebraska, Omaha
1994 Visiting Professor, State University of New York, Brooklyn, New York
1994 Hymie Nossel Memorial Lecturer, Columbia University
1994 Sol Sherry Lecturer, American Heart Association, Council on Thrombosis
1995 Shirley Johnson Memorial Lecturer, International Society on Thrombosis
and Hemostasis, Jerusalem, Israel
1996 Vascular Visiting Professor, Cornell University College of Medicine
1996 Leela Moolgaokar Transfusion Medicine Oration, Bombay, India
1996 Paul Dudley White Lecturer, 29th Annual New York American College of
Cardiology Symposium
1997 Herion-Walker Lecturer, University of North Carolina at Chapel Hill
1997 Oscar D. Ratnoff Lecturer, Case Western Reserve University
1997 University of Oklahoma, Alpha Omega Alpha Lecturer
1999 Clement Finch Visiting Professor of Hematology, University of
Washington
1999 Bernard and Helen Perlman Lecturer, The New York Cardiological
Society
2001 Tibor Greenwalt Lecturer, American Association of Blood Banks
2002 Richard H. Aster Lecturer, Blood Center of Southeastern Wisconsin
2002 Teichman Lecturer, Tel Aviv University, Israel
2002 Commencement Speaker, Mount Sinai School of Medicine
2002 Ernest Cotlove Lectureship, Academy of Clinical Laboratory Physicians and
Scientists
2002 Eccles Visiting Professor, University of Utah School of Medicine
2002 Holly Smith Visiting Professor, U.C.S.F. School of Medicine
2003 Christian Herter Lecturer, N.Y.U. School of Medicine
2003 Commencement Speaker, State University of New York at Stony Brook
School of Medicine
2005 Tinsley Randolph Harrison Visiting Professor, Vanderbilt University
2005 Roy C. Swan Lecture, Weill Medical College of Cornell University
2006 Dale Blazey Memorial Lecture, Duke University
2006 Alexander Wiener Memorial Lecture, New York Blood Center
2006 Martin Rehfuss Lecture, Jefferson Medical College
2007 Irvine H. Page Lecture, Cleveland Clinic
2007 C. Thomas Caskey Lecture, University of South Carolina
2008 Michael Leahey and Dr. Edward Leahey, Jr. Lecture, Columbia University
2008 Emery A. Wilson Distinguished Lecture, University of Kentucky
2008 Keynote Lecturer, Platelets 2008, Woods Hole
2008 Pioneer of Hematology Lecturer, American Society of

Hematology

Honors, Awards and Prizes:

1977 Fight for Sight Citation for outstanding achievement in clinical vision
research
1977 Jane Nugent Cochems Prize for best essay on basic vascular disease

Honors, Awards and Prizes: (continued)

Fellow, John Simon Guggenheim Memorial Foundation Fellow, Weizmann
Institute of Science, Rehovot Israel, 1982

- 1987 International Investigator Recognition Award. Third Biennial Awards for Contributions to Hemostasis (one of five recipients)
National Heart Lung and Blood Institute MERIT Grant, 1989-1999
1989 Nellie Westerman Ethics Prize, American Federation for Clinical Research
- 1991 Solomon A. Berson Medical Alumni Achievement Award in Clinical Science, New York University Medical Center
c7E3 Fab (abciximab; ReoPro[®]) named 1995 Best New Therapeutic Product by the Biotechnology Industry Organization and Innovation of the Year by Pharmazeutische Zeitung
- 1997 Inventor of the Year, The New York Intellectual Property Law Association
- 1997 International Society on Thrombosis and Haemostasis Distinguished Career Award
1997 American Heart Association National Research Achievement Award (Co-recipient with Dr. Oliver Smithies)
- 1997 Dr. J. Lester Gabilove Award, Mount Sinai School of Medicine for Significant Contribution to Medicine
1997 Jacobi Medallion, Mount Sinai Alumni Association
1998 Man of the Year, Village Times Publications, Suffolk County, NY
- 1999 Committee of 1000 Faculty Award, Mount Sinai School of Medicine
2000 Therapeutic Frontiers Award, American College of Clinical Pharmacy
2001 Bugher Foundation Award for Achievement in Cardiovascular Science and Medicine, The New York Chapter of the American Heart Association
- 2001 Alexander Richman Award for Humanism in Medicine, Mount Sinai School of Medicine
- 2001 Special Achievement Award, Department of Nursing, Mount Sinai School of Medicine
- 2001 Warren Alpert Foundation Award (shared with Dr. Eugene Braunwald), Harvard Medical School
- 2002 Cotlove Award, Academy of Clinical Laboratory Physicians and Scientists
- 2004 Gold Humanism Honor Society, Arnold P. Gold Foundation
2005 Robert J. and Claire Pasarow Foundation Award for Cardiovascular Research
2005 Henry M. Stratton Medal, American Society of Hematology
2006 Laureate Award, American College of Physicians, New York Downstate Chapter
2006 Medical Achievement Award, North General Hospital
2008 Top Teaching Award, Department of Medicine, Mount Sinai School of Medicine
2010 Ernest Beutler Lecture and Award, American Society of Hematology

Clinical and Scientific Recognition:

- AMA Physicians Recognition Award 1973-2012
Who's Who in Frontier Science and Technology 1983
Who's Who in the East 1985
The Best Doctors in America 1994-1995, 1999-2001, 2008-2009; Best Doctors in America, Northeast Edition 1996-2001
Top Doctors: New York Metro Area, 2001-2009
2000 Outstanding Scientists of the 20th Century – Second Edition – International Biographical Centre, Cambridge, England
America's Top Doctors, 2001-2009
New York Best Doctors, New York Magazine, 2001-2006

Honorary Fellowships and Masterships:

Fellow, New York Academy of Science
Fellow, New York Academy of Medicine
Fellow, College of American Pathologists
Fellow, American Association for the Advancement of Science
Fellow, American Academy of Arts & Sciences
Master, American College of Physicians

Honor Societies:

Phi Beta Kappa
Alpha Omega Alpha
American Society for Clinical Investigation
Association of American Physicians
Institute of Medicine of the National Academies
National Academy of Sciences
American Academy of Arts and Sciences

Honorary Professorships and Degrees:

1995 Honorary Professor of Hunan Medical University, People's Republic of China
2002 Honorary Doctor of Science, Mount Sinai School of Medicine
2003 Honorary Doctor of Science, State University of New York at Stony Brook School of Medicine
2007 Honorary Doctor of Science, North Shore-LIJ Health System

MEDICAL and SCIENTIFIC ORGANIZATIONS:

American Federation for Medical Research
American Heart Association
American Society of Hematology
International Society on Thrombosis and Haemostasis
Harvey Society

OFFICES:

Secretary, Board of Directors, S.U.N.Y. Stony Brook
Clinical Practice Management Plan, 1978-83
Secretary/Treasurer, Board of Directors, S.U.N.Y.
Stony Brook, Clinical Practice Management Plan, 1983-7
Councilor, Eastern Section, American Federation for Clinical Research,
1981-1986
American Society of Hematology
Treasurer, 1983-1987
Vice President, 1995-1996
President-elect, 1996-1997
President, 1997-1998
Councilor, Alpha Omega Alpha, MU Chapter, NY 1985-1990
Secretary/Treasurer, Alpha Omega Alpha, MU Chapter, New York, 1985-1986
Councilor, International Society on Thrombosis and Haemostasis, 1986-1992
Elected Member, International Committee on Thrombosis and Haemostasis,
1986-1991
Phi Beta Kappa, Alpha Beta of New York, Vice President 1990-1991,
President
1991-1992
Treasurer, XIIIth Congress of the International Society on Thrombosis and
Haemostasis, New York, 1993
Association of Professors of Medicine, Board of Directors, 2000-2001
Association of Patient-Oriented Research, Board of Directors, 2002-2005
Society for Clinical and Translational Science, Founding President 2009-2010

NATIONAL AND INTERNATIONAL COMMITTEES:

United States Pharmacopeia, Subcommittee on Scope Advisory Panel on
Hematologic and Neoplastic Disease, 1975-1980
National and International Program Selection Committees:

Res./Am.) Am. Society of Hematology, Am. Soc. Clin. Invest./ Am. Fed. Clin. Assoc. Phys., Am. Heart Association, Int'l Soc. Thromb. Haemostas.
 American Heart Association Executive Board Member, 1982-1984, 1990-1992
 American Society of Hematology
 Finance Committee and Committee on Investment and Audit,
 1983-1990; 1993-2007 (Chair 2006-2007)
 Executive Committee, 1984-1987; 1996-1998
 Blood Editor Search Committee, 1986
 Corporate Advisory Committee, 1986-1987
 Thrombosis Subcommittee, 1987-1989
 Advisory Committee 1987-1992; 1998; Chair, 1999-2000
 Committee on Public Information and Governmental Affairs, 1988-1998
 Chairman, 1992-1994

Education Committee 1996-1998
 Committee on Practice, 1996-1998
 Self-Management Transition Committee, 1999
 Development Taskforce Committee, 2004-

International Society on Thrombosis & Haemostasis
 Publications Committee, 1986-1992
 Chairman, Finance Committee, 1990-1992
 Cochairman, Subcommittee on Platelets, 1982-1983
 Chairman, Subcommittee on Platelets, 1983-1985
 ISTH-BAT Standing Committee of the SSC, 2011-

American Board of Internal Medicine
 Hematology Board Member, 1992-1996
 Hematology Self-Evaluation Process Committee, 2002-2004

Institute of Medicine
 Reviewer, 2002
 Committee on Accelerating the Research, Development, and Acquisition
 of Medical Countermeasures Against Biological Warfare Agents, 2002-
 2003

National Academy of Sciences
 2006 Richard Lounsbery Award Jury

Society for Clinical and Translational Science
 Board of Directors, 2009-11

LABOR MANAGEMENT NEGOTIATIONS:

Stony Brook Interim Clinical Practice Management Plan, 1979
 Stony Brook Clinical Practice Management Plan, 1983

ADVISORY POSITIONS:

Director, Stony Brook Foundation, 1991-1993, 2001-
 Director, Long Island High Technology Incubator, Stony Brook, 1991-1993
 Scientific Advisor, ARIAD Pharmaceuticals, Cambridge, MA 1991-
 Consultant, Centocor Inc., Malvern, PA, 1986-1995
 Scientific Advisory Board Member, Otsuka Pharmaceutical Company, Rockville,
 MD, 1985-1993
 Member, Scientific Advisory Board, New York Blood Center, New York, NY,
 1994-
 Consultant, Genentech, South San Francisco, CA, 1994-1995
 N.Y. Biotechnology Association Scientific Advisory Board, 1995-1999
 Oxford Foundation, Scientific Advisory Board, 1996-1998
 Scientific Advisory Board, Accumetrics, San Diego, CA, 1996-2001, 2004-

ADVISORY POSITIONS: (continued)

Chairman, Rockefeller University Hospital and Clinical Investigation
 External Review Committee, 1999
 National Heart, Lung, and Blood Institute Board of Extramural Advisors,

2000-2007

Vascular Medicine Working Group, NHLBI, October, 2001
N.I.H. Director's Road Map Meeting, NIH, August, 2002
Board of Governors, Clinical Center, N.I.H., 2002-2005
N.I.H. Director's Blue Ribbon Panel on The Future of Intramural Clinical Research, 2003
Advisory Board for Clinical Research (ABCR), N.I.H. 2005-2007
Chair, Working Group on Research Opportunities (ABCR) 2005-2007
Chair, NHLBI Thrombosis and Thrombophilia Working Group, June 2005
N.I.H. Director's Road Map Meeting, August 2006
Chair, Doris Duke Charitable Foundation, External Review Panel, June 2006
NHLBI Strategic Planning (SPARK I, 1998; SPARK II, 2002; 2006 Level 1 Co-Chair and Level 2 Discussion Leader)
International Advisory Panel (IAP), A*STAR Graduate Academy (AGA), Singapore, 2006-2008
National Medical Research Council (NMRC), Foreign Advisor, Singapore, 2006-2009
University of Pennsylvania CTSA/ITMAT External Advisory Committee, 2006-
NYU School of Medicine K30 External Advisory Committee, 2006-2009
National Heart, Lung, and Blood Institute Board of External Experts, 2007-2009
Yale University CTSA External Advisory Board Committee, 2007-
National Center for Research Resources Strategic Planning Retreat, December 2007
Duke University CTSA External Advisory Committee, 2008-
Burroughs-Wellcome Fund Board of Directors Meeting, July 2008
NHLBI-NHGRI Genotype-Phenotype Working Group in Sickle Cell Disease, July 2008
NHLBI-ORD Computational Models for analyzing Genotype-Phenotype Associations in Rare Diseases Working Group Meeting, July 2008
NYU School of Medicine Dean's Strategy Initiatives Planning Committee, 2008-2009
CTSA Principal Investigator representative at the NIH Institute and Center Directors Leadership Forum, September 2008
NHLBI Workshop on Sickle Cell Disease: Clinical Priorities/Clinical Trials, Co-chair Sub-Committee on Vascular Biology/Pathophysiology
NHLBI Advisory Council, 2009-
NIH Director's "Big Think," 2010
NHLBI Director Search Committee, 2010-2011
NIH Undiagnosed Diseases Program External Advisory Group, 2010
NHLBI Accelerated Innovations Program Working Group, November 2010
NHLBI Working Group meeting titled "Guided Antithrombotic Therapy: Current Status and Future Research Directions, July 2011

PUBLIC TESTIMONY:

Senate Appropriations Subcommittee on Labor, Health and Human Services, and Education, National Institutes of Health budget. Appeared on behalf of American Society of Hematology. June 7, 1988
House Appropriations Subcommittee on Labor, Health and Human Services, and Education. National Institutes of Health budget. Appeared on behalf of American Society of Hematology. April 30, 1992, March 3, 1993, and February 2, 1994

EDITORIAL POSITIONS:

Editorial Board, Blood, 1981-1985
Editor, American Heart Association Council on Thrombosis Newsletter, 1982-1984

Editor, Progress in Hemostasis and Thrombosis, Grune and Stratton, Volume 8, 1986, Volume 9, 1988, and Volume 10, 1990
Reviewing Editor, Journal of Laboratory and Clinical Medicine, 1991
Consulting Editor, Journal of Clinical Investigation, 1992-1997
Editorial Board, Current Opinion in Hematology, 1991-2005
Editor, Williams Hematology, 5th Edition, 1995; 6th Edition, 2000
Editorial Board, Blood Cells, Molecules & Diseases, 1999-
Editorial Board and Guest Editor, Circulation, 1993-2004
Editorial Board, Mount Sinai Journal of Medicine, 1994-2001
Editorial Board, Haemostasis, 1996-2002
Editorial Board, Thrombosis and Haemostasis, 1999-2003
Editorial Board, Journal of Haemostasis and Thrombosis, 2003-

GRANT REVIEW AND DEVELOPMENT (selected):

Member, National Heart, Lung, and Blood Institute, Research Review Committee
B, 1980-1984
Chairman, National Heart, Lung, and Blood Institute: Special Center of Research
in Thrombosis Review Committee, 1985
Hematology Study Section 2, NIH, 1988-1991; Chairman 1990-1991
Member, Center for Scientific Review Advisory Committee Working Group on Cardiovascular Sciences Integrated Review Group, 2000
Acute Lung Injury Working Group, NHLBI, January, 2002
Action to Control Cardiovascular Risk in Diabetes (ACCORD) Trial, NHLBI, 2002
Chair, C-Reactive Protein Protocol Review, NHLBI, 2003
Ad hoc Member Hemostasis and Thrombosis Study Section, October, 2005
National Heart, Lung, and Blood Institute Advisory Council, 2009-

GRANTS:

National Institutes of Health:
(PI) HL 19278 Ristocetin Induced Platelet Aggregation 1976-1979 (\$79,905)
HL 19278 Biophysics/Biochemistry of Platelet Aggregation 1979-1984 (\$236,762) (PI)
HL 19278 Biochemistry/Physiology of Platelet Membrane Receptors 1984-1989 (\$599,704) (PI)
HL 19278 Biochemistry/Physiology of Platelet Membrane Receptors 1989-1999 (MERIT) \$2,586,831 (PI)
1P50 HL54469-01 SCOR Grant Project 5. Antiplatelet agents as anticoagulants 1996-2001 (\$492,539)
HL 19278 Biochemistry/Physiology of Platelet Membrane Receptors 1999-2003 (\$1,087,145) (PI)
PO1-NS23393 Program Project Grant. Center for Stroke Research 2001-2005 (\$157,297)
1P50 HL54469 SCOR Grant Project 5, Platelet-Leukocyte Interactions In Vascular Disease, 2001-2006 (\$678,693)
HL 19278 Beta-3 Integrins in Platelet and Vasocclusive Disorders 2003-2008 (1,898,969) (PI)
1 S07 RR018141 Information Technology to Enhance IRB Functions 2002-2004 (\$150,000) (PI)
2 S07 RR018141 Novel On-Line Education in Protection of Human Subjects 2003-2004 (\$150,000) (PI)
3R01HL019278-29S1 Integrin Biogenesis in Human ES-derived Megakaryocytes 2004-2006 (\$100,000) (PI)

GRANTS: (continued)

2 M01RR000102 General Clinical Research Center
2004-2009 (\$30,596,304) (PI) (Terminated in 2006 when CTSA awarded)

and

- 1 UL1RR024143 Transforming Clinical and Translational Research Education at Rockefeller 2006-2011 (\$40,993,248) (PI)
- 1 KL2RR024142 Transforming Clinical and Translational Research and Education at Rockefeller 2006-2011 (\$4,512,510) (PI)
- 1 RO3 MH083257 High Throughput Screen for Novel Inhibitors of Platelet Integrin alphaIIb-beta3 (\$25,000) (PI)
- HL 19278 Integrin alphaIIbbeta3 Structure, Activation, and Ligand Binding 2008-2013 (2,475,888) (PI)
- 3 UL1RR024143-04S1 Transforming Clinical and Translational Research and Education at Rockefeller 2009-2011 (\$750,638) (PI)
- 3 UL1RR024143-04S2 Transforming Clinical and Translational Research and Education at Rockefeller 2009-2011 (\$618,491) (PI)
- 3 UL1RR024143-04S3 Transforming Clinical and Translational Research and Education at Rockefeller 2009-2011 (\$384,124) (PI)
- 3 UL1RR024143-04S4 Transforming Clinical and Translational Research and Education at Rockefeller 2009-2011 (\$418,362) (PI)
- 1 UL1RR024143 Transforming Clinical and Translational Research Education at Rockefeller 2011-2016 (\$33,710,635) (PI)
- 1 KL2RR024142 Transforming Clinical and Translational Research and Education at Rockefeller 2011-2016 (\$2,386,000) (PI)
- UL1RR024143-Supplement Transforming Translational Science and Education to benefit human health 2011-2012 (\$288,045) (PI)
- UL1RR024143-Supplement Transforming Translational Science and Education to benefit human health 2011-2012 (\$499,958) (PI)

and

American Heart Association:

83 890 Platelet Membrane Receptors in Thrombotic Disease 19831986 (\$98,700)

S.U.N.Y.Stony Brook Biotechnology Center:

Diagnostic and Prognostic Significance of Plasma Glycocalicin in Thrombocytopenic and Thrombotic Disorders 198788 (\$35,000) (PI)

Specific Inhibitors of Platelet Aggregation 19881989 (\$35,000)

Thromboerythrocytes 19891991 (\$70,000) (PI)

Thrombin Receptor 19921993 (\$35,000) (PI)

Tri-Institutional (Weill-Cornell, Memorial-Sloan Kettering, Rockefeller)

Platelet Therapy Using ES Cell-Derived Megakaryocytes 2006-2008 (\$400,000) (PI)

INVENTIONS:

The Soft Pedal Venous return augmentation device

10E5 Monoclonal Antibody to Human Platelet GPIIb/IIIa (aIIb β 3)

6D1 Monoclonal Antibody to Human Platelet GPIb

7E3 Monoclonal Antibody to Human Platelet GPIIb/IIIa (aIIb β 3) and aV β 3

6F1-Monoclonal Antibody to Human Platelet a2 β 1

c7E3-chimeric Mouse/Human Antibody to Human Platelet GPIIb/IIIa (aIIb β 3)

and

aV β 3

Thromboerythrocytes

Novel Thrombin Receptor Activating Peptide

Novel Assay to Assess Platelet GPIIb/IIIa Receptor Blockade

PATENTS:

Canadian

Fibrinogen Blocking Monoclonal Antibody.

1,297,815. March 24, 1992

Platelet Function Inhibiting Monoclonal Antibody.

1,297,816. March 24, 1992

United States

1. Radiolabeled Antiplatelet Monoclonal Antibody for Imaging In-Vivo Thrombi. 5,225,181. July 6, 1993
 2. Method of Treatment for Myocardial Infarction. 5,275,812. January 4, 1994
 3. Method for Preparing Targeted Carrier Erythrocytes. 5,328,840. July 12, 1994
 4. Fibrinogen Blocking Monoclonal Antibodies. 5,336,618. August 9, 1994
 5. Method of Inhibiting Thrombus Formation by the 7E3 Monoclonal Antibody 5,387,413. February 7, 1995
 6. Platelet Function Inhibiting Monoclonal Antibody Fragment 5,440,020. August 8, 1995
 7. Anti-Aggregatory Agents 5,338,725. August 16, 1994
 8. Peptidase Resistant Thrombin Receptor Peptide Ligand 5,455,228. October 3, 1995
 9. Platelet Blockade Assay 5,763,199. June 9, 1998
 10. Platelet-Specific Chimeric 7E3 Immunoglobulin 5,770,198. June 23, 1998
 11. Platelet Blockade Assay 5,854,005. December 29, 1998
 12. DNAs Encoding Chimeric Immunoglobulin Light or Heavy Chains and Fragments Thereof Having Variable Regions Derived From Monoclonal Antibody 7E3, and Vectors and Host Cells Comprising Same 5,877,006. March 2, 1999
 13. Method of Antithrombotic Therapy Using Anti-GPIIb/IIIa Antibodies or Fragments Thereof, Including c7E3 5,976,532. November 2, 1999
- Europe (Austria, Belgium, France, Germany, Italy, Luxembourg, Netherlands, Sweden)
Platelet Function Inhibiting Monoclonal Antibody Fragment 206,533. April 13, 1994.
- Japan
Platelet Function Inhibiting Monoclonal Antibody Fragment 2,524,978. May 31, 1996
- European
Peptidase Resistant Thrombin Receptor Peptide Ligand 707 595. June 10, 1998

APPROVED DRUG: Chimeric 7E3 Fab (abciximab; ReoPro®)
Approved, 1994 United States & Puerto Rico, Sweden, England, France, Germany, Spain, Portugal, Luxembourg, Netherlands, Italy, Greece, Hungary, Austria. Subsequent approvals: Argentina, Australia, Brazil, Canada, Columbia, Denmark, Finland, India, Ireland, Israel, Korea, Mexico, Norway, South Africa, Switzerland, and United Kingdom

APPROVED DIAGNOSTIC DEVICES:

Ultegra Rapid Platelet Function Assay, Accumetrics, San Diego, CA.
Approved 1999, United States Food and Drug Administration

VerifyNow™ Aspirin Assay, Accumetrics, San Diego, CA
Approved 2004, United States Food and Drug Administration

VerifyNow™ P2Y12 Assay, Accumetrics, San Diego, CA
Approved 2005, United States Food and Drug Administration

PUBLICATIONS

PeerReviewed Original Articles

1. Collier, B.S., Zucker, M.B.. Reversible decrease in platelet retention by glass bead columns (adhesiveness) induced by disturbing the blood. *Proc Soc Exp Biol Med*, 136:769771, 1971.
 2. Hirschman, R.J., Yankee, R., Collier, B.S., Gralnick, H. Sensitive methods for the detection and characterization of platelet isoantibodies. *Thromb Diath Haemorrh*, 9:408 415, 1973.
 3. Gralnick, H., Collier, B.S., Marchesi, S.. Immunological studies of factor VIII in haemophilia and von Willebrand's disease. *Nature*, 244:281282, 1973.
 4. Collier, B.S., Hirschman, R.J., Gralnick, H.R. Studies of the factor VIII/von Willebrand factor antigen on human platelets. *Thromb Res*, 6:469480, 1975.
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