CURRICULUM VITAE

Jeffrey R. Bender, M.D.

**Version date:** March 28, 2024

**School:** Yale School of Medicine

**Education:**

9/1971-5/1975 BA, Biology, Brandeis University, Waltham MA

9/1975-5/1979 MD, University of California, San Francisco, CA

**Career/Academic Appointments:**

1979-1982 Resident in Medicine, Yale New Haven Hospital, New Haven, CT

1982-1983 Chief Medical Resident; Instructor and Associate in Medicine, Yale University School of Medicine, New Haven, CT

1983-1986 Postdoctoral Fellow in Cardiology, Stanford University, Stanford CA

1984-1988 Research Fellow in Immunology, Department of Pathology, Stanford University, Stanford CA

1986-1988 Clinical Assistant Professor of Medicine; Stanford School of Medicine, Stanford, CA

1988-1993 Assistant Professor of Medicine; Director, Cardiovascular Immunology Laboratory, Division of Cardiovascular Medicine; Member, Cardiac Transplant Group; Attending Physician, Cardiac Catheterization Laboratory, Yale University School of Medicine, New Haven, CT

1993-1997 Associate Professor of Medicine (Cardiovascular) and Immunobiology (Adjunct)

1997-2000 Associate Professor of Medicine (Cardiovascular) with tenure

1999-2000 Associate Professor of Immunobiology with tenure

2000- Professor of Medicine (Cardiovascular Medicine) & Immunobiology

2002- Robert I. Levy Professor of Preventive Cardiology

2014-2021 Director, Yale Cardiovascular Research Center

2021- Senior Vice Chief for Academic Development, Cardiovascular Medicine

**Administrative Positions:**

1991-2003 Member, Molecular Cardiobiology Program, Boyer Center for Molecular Medicine

1992-2005 Cardiovascular Fellows’ Coordinator of Research, Yale School of Medicine, New Haven CT

1994-2001 Associate Chief of Cardiovascular Medicine, Research

1995-2001 Director, Boyer Center for Molecular Medicine Junior Faculty Clinical Scholar’s Program

2006-2009 Co-director, Cardiovascular Medicine Fellows' Clinic

**Board Certification:**

1983- American Board of Internal Medicine - Internal Medicine

1986- American Board of Internal Medicine - Cardiovascular Medicine

**Professional Honors & Recognition:**

***International/National/Regional***

1979 Alpha Omega Alpha, University of California, San Francisco

1984-1986 National Research Service Award, NIH

1986-87 Advanced Research Fellowship Award, American Heart Association

1988-93 Clinical Investigator Award, NIH

1992 Young Investigator Award, American Heart Association Basic Science Council

1992-98 Sackler Foundation Award

1996 Election to American Society for Clinical Investigation

1998 Election to Interurban Clinical Club

1999 Election to American Heart Association Heritage Board of Directors

2001 Election to the Association of University Cardiologists

2002 Election to the Association of American Physicians

2005 Elected President, Interurban Clinical Club

2005- Appointed to Leadership Development Committee, American Heart Association Heritage Board

2006-07 Selected Chairman of American Heart Association Heritage Research Committee

2010 Elected to Association of University Cardiologists Council

2011 Appointed to ATVB Council Leadership Committee, American Heart Association

2011 Elected to National Research Committee, American Heart Association

2014-15 President, Association of University Cardiologists

***University***

1992 Andrew P. Mellon Award, Yale University School of Medicine

2002 Robert I. Levy Professorship (Yale University endowed chair)

**Grant/Clinical Trials History:**

***Current Grants***

Agency: NIH/DHHS

ID#: 1R43HL170910-01

Title: IL-17A mRNA-targeted oligonucleotide therapeutics in Idiopathic Pulmonary Fibrosis (IPF)

PI: Co-PI Ramgolam, Bender

Role on Project: Co-PI

Percent effort: 5

Total costs: $111,458

Project period: 10/01/2023 - 09/30/2024

Agency: NIH/DHHS

ID# 1R21AI168968-01

Title: Immune cell skewing with RNA target site oligonucleotides to promote vascular smooth muscle homeostasis

PI: Bender, Jeffrey

Percent effort: 15%

Total costs: $251,250 ($101,250 indirect)

Project period: 11/10/2022 – 10/31/2024

Agency: NIH/NHLBI

ID#: 1R35HL150766-01

Title: Novel vascular smooth muscle cell progenitors in development and disease

PI: Greif, Daniel

Role on project: Co-Investigator

Percent effort: 3%

Total costs: $1,003,982 ($404,590 indirect)

Project period: 07/01/2020 – 06/30/2027

Agency: NIH/NIAMS

ID# 1R21AR079591-01

Title: microRNA target site RNA-directed oligonucleotide topical therapeutics in psoriasis

PI: Bender, Jeffrey

Percent effort: 10%

Total costs: $182,408 ($73,508 indirect)

Project period: 7/1/2021 – 6/30/2024

Agency: NIH/NHLBI

ID#: T32HL007950

Title: Vascular Training Grant

PI: Bender, Jeffrey

Percent effort: 15% (no salary support)

Total costs: $582,512 ($39,982 indirect)

Project period: 9/30/2000 – 6/30/2026

***Past Grants***

Agency: Blavatnik Fund for Innovation

ID#: 17-001134

Title: Therapeutic miRNA target site-blocking oligonucleotide in autoimmune/inflammatory disease

PI: Bender, Jeffrey

Percent effort: 5%

Total costs: $300,000

Project period: 6/1/2018 - 5/31/2023

Agency: NIH/NEI

ID#: 1R43EY032840-01

Title: IL-23 and IL-17A mRNA-targeted oligonucleotide therapeutics in autoimmune uveitis

PI: Bender, Jeffrey (Subaward PI)

Percent effort: 5%

Total costs: $96,217 ($38,774 indirect)

Project period: 9/1/2021 – 8/31/2023

Agency: NIH/NIAID

ID#: R21AI124116

Title: Modulation neuroinflammation through interference of cooperative microRNA-RNA-binding protein interactions

PI: Bender, Jeffrey

Percent effort: 15%

Total costs: $167,500 ($67,500 indirect)

Project period: 6/1/2016 – 5/31/2018

Agency: CT Biomedical Research Fund

ID#: M160327

Title: Macrophage integrin-modulated RNA stability in neovessel formation

PI: Bender, Jeffrey

Percent effort: 20%

Total costs: $298,986

Project period: 10/1/2015-9/30/2018

Agency: CARIPLO Foundation Award

ID#: M157423

Title: Targeting Myeloid Cell Migration and Differentiation at Sites of Chronic Inflammation: Role of the Stress Activated Protein Kinase Network

PI: Pardi, Ruggero

Role on Project: Co-P.I.

Percent effort:

Total costs: $400,000

Project period: 06/1/2015-05/31/2017

Agency: NIH/NIGMS

ID#: 1R01GM126412-01

Title: Competitive macrophage microRNA-RNA binding protein interactions in wound repair

PI: Bender, Jeffrey

Percent effort: 20%

Total costs: $322,438 ($129,938 indirect)

Project period: 04/01/2013 – 03/31/2018

Agency: Sackler Foundation

ID#: M117394

Title: Vascular Inflammation in Atherosclerosis

PI: Bender, Jeffrey

Percent effort: 12%

Total costs: $450,000

Project period: 10/1/2009 - 06/30/2016

Agency: NIH/NHLBI

ID#: P01HL070295

Title: An IFN-g-Integrin-Growth Factor Axis in GA Biomarker Development

PI: Pober, Jordan

Role on Project: Project 3 PI

Percent effort: 15%

Total costs: $387,265

Project period: 9/9/2001-8/31/2006

Agency: NIH/NHLBI

ID#: R01HL061782

Title: Molecular Models of Estrogen-induced Vascular Protection

PI: Bender, Jeffrey

Percent effort: 30%

Total costs: $372,375

Project period: 7/1/1999 – 3/31/2012

Agency: NIH/NHLBI

ID#: R01HL052131

Title: Contact Dependent Endothelial Activation by NK Cells

PI: Bender, Jeffrey

Percent effort: 25%

Total costs: $324,248

Project period: 4/1/1995 – 3/31/2004

Agency: NIH/NHLBI

ID#: R01HL04331

Title: Molecular Models of Immune-mediated Vascular Injury

PI: Bender, Jeffrey

Percent effort: 30%

Total costs: $409,613 ($162,113 indirect)

Project period: 4/1/1991 – 5/31/2013

Agency: NIH/NHLBI

ID#: K08HL002328

Title: Lymphocyte-Endothelial Cell Molecular Interactions

PI: Bender, Jeffrey

Role on Project: PI

Percent effort:

Total costs: $66,133

Project period: 9/1/1988 – 8/31/1993

**Pending Grants**

Agency: NIH/DHHS

ID#:

Title: MicroRNA target site IL-17A mRNA-directed oligonucleotide therapeutics in alcohol- associated liver disease

PI:

Role on Project: Subaward PI

Percent effort: 5

Total costs: $129,430

Project period: 06/01/2024 - 05/31/2026

Agency: NIH/DHHS

ID#:

Title: Androgen-driven mechanistic triggers of endothelial dysfunction in transgender men

PI: Bender, Jeffrey

Role on Project: Co-PI

Percent effort: 25

Total costs: $4,198,145

Project period: 07/01/2024 - 06/30/2029

**Patents**

1. **Bender, JR,** Ramgolam, V, Yarovinsky T, **(approved 7/19/2023) US/0302037A1***“Blockade of MIR466L-3P binding to IL-17A mRNA with site-specific target site blocker prevents neuro-inflammatory-mediated disease”. Approved*
2. **Bender, JR,** Ramgolam, V, Yarovinsky T, **(filed** 4/29/2022**) US059065** *“MicroRNA Blockade for the Treatment of Disease” (Pending)*

# Invited Speaking Engagements, Presentations, Symposia & Workshops Not Affiliated with Yale:

***International/National***

1. "The molecular bases of lymphocyte-endothelial cell interactions: An in vitro model for allograft rejection." San Raffaele Scientific Institute, University of Milan, April 18, 1988.
2. "Mechanisms of lymphocyte-endothelial cell adhesion and cytotoxicity." Session Chairman. FASEB Summer Conference on Molecular Mechanisms of Bone Marrow Transplantation, Saxtons River, Vermont, July 16-21, 1989.
3. "Unstable angina: mechanisms of ischemia and injury." UCLA Symposium, La Costa, California. December 6-9, 1990.
4. "Interaction of lymphocytes with endothelium in transplantation arteriosclerosis." International Society for Applied Vascular Biology. St. Louis, MO., November 5-8, 1992.
5. "Molecular Mechanisms of Lymphocyte-Endothelial Cell Adhesion." Vanderbilt University, Nashville, TN., October 20-21, 1992.
6. "Leukocyte-Endothelial Cell Adhesion: Integrin-cytoskeletal Interaction." NIH Symposium on the Role of Biological Response Modifiers in Molecular and Clinical Transfusion Medicine, Arlington, VA., September 9-10, 1993.
7. "Effect of Estrogens on Leukocyte-Endothelial Cell Interactions." American Heart Association Scientific Sessions, Council on Circulation Colloquium, Dallas, TX., November 14, 1994.
8. "Genetic Diversity of Endothelial Activation." Department of Medicine, McGill University, Montreal, Quebec, Canada, December 9, 1994.
9. "Lymphocyte-Endothelial Cell Interactions: Models of Immune-Mediated Vascular Injury." Department of Medicine, Stanford University, February 8, 1996.
10. "NK Cell-Endothelial Cell Interactions in Vascular Immunity." Department of Immunology, Pasteur Institute, Paris, February 23, 1996.
11. "Endothelial Estrogen Receptors and their Regulation." ASPET Colloquium at Experimental Biology 1996 Washington DC, April 18, 1996.
12. "Effects of Estrogen on Endothelial Activation." Blood Vessel Club at the Experimental Biology/American Association of Immunologists Meeting, New Orleans, LA., June 2, 1996.
13. "Estrogen Effects on Nitric Oxide Synthases and Adhesion Molecules. Estrogen and the Blood Vessel Wall" Symposium, 9th International Vascular Biology Meeting, Seattle, WA., September 3-4, 1996.
14. "Regulation of Endothelial NOS by Estrogen." Nitric Oxide, Cytchromes P450 and Sexual Steroid Hormones Workshop, San Francisco, CA., October 9-11, 1996.
15. "Adhesive Glycoproteins in Vascular Biology" Session Moderator Intercouncil Working Group on Vascular Biology, American Heart Association 69th Scientific Sessions, November 10, 1996.
16. "Effects of Estrogen on Endothelial Activation." Blood Vessel Club at the Experimental Biology/American Association of Immunologists Meeting, New Orleans, LA., June 2, 1996.
17. "Estrogen Effects on Nitric Oxide Synthases and Adhesion Molecules." Estrogen and the Blood Vessel Wall Symposium, 9th International Vascular Biology Meeting, Seattle, WA., September 3-4, 1996.
18. "The Vascular Endothelium: Stimulator and Target of Immune Responses." NIH National Institute of Allergy and Infectious Diseases Workshop on Systemic Vasculitis: Future Research Directions. Bethesda, MD., September 15, 1997.
19. "Adhesion-dependent Leukocyte-Endothelial Cell Activation." Department of Medicine, University of Pennsylvania, Philadelphia, PA., October 6, 1997.
20. "Endothelial NOS Regulation by Estrogen." Division of Molecular Cardiology, Tufts University School of Medicine, Boston, MA., November 7, 1997.
21. "Endothelial Major Histocompatability Complex Gene Expression and Protein Function: Clues to Vascular Activation and Injury." Keystone Symposium on Immunologic Aspects of Cardiovascular Disease, Keystone, CO., January 20-26, 1997.
22. Effects of Ovarian Hormones on Leukocyte-Endothelial Cell Interactions." Hormonal Influences on Vascular Inflammation and Immunity Symposium. Wake Forest University, Winston-Salem, NC., October 15, 1998.
23. "Effects of Estrogen of Endothelial Activation." Cardiac Branch, NHLBI, Bethesda, MD., November 23, 1998.
24. "Leukocyte-Endothelial Cell Interactions." Division of Cardiovascular Research, Pfizer Pharmaceuticals, Groton, CT., January 12, 1999.
25. "Regulation of eNOS in the Endothelium." Novartis Advisory Board Meeting for the Development of Aromatase Inhibitors. New York, NY., January 23, 1999.
26. "Effects of Estrogen on Nitric Oxide Release." NIH (NICHD) Symposium on Vasoactive Substances and Free Radicals in Prenatal Biology. Alexandria, VA., May 7, 1999.
27. "Lymphocytes and Cytokines in Atherogenesis." American Association of Immunology (AAI) Symposium on Immunity in Atherosclerosis. Seattle, WA., May 15, 2000.
28. "Imaging in Vascular Biology." American Society of Nuclear Cardiology. Bar Harbor, Maine, July 17, 2000.
29. Effects of Estrogen on Vascular Inflammation." Graylyn Conference on Steroid Hormones in Cardiovascular Biology. Bowman Gray School of Medicine, Greensboro, North Carolina. October 13, 2000.
30. Lymphocyte Adhesion Receptors and Endothelial Activation; Models of Inflammation and Immune Responses." Department of Medicine, NYU School of Medicine, July 27, 2000.
31. "Inflammatory and Hormonal Effects on the Endothelium." Ohio State University School of Medicine, Columbus, Ohio. June 4, 2001.
32. "Effects of Ovarian Steroid Hormones on Leukocyte Adhesion." Estrogen and Inflammation Symposium, American Society of Physiology, Pittsburgh, PA. October 19, 2001.
33. "Molecular Imaging of the Vasculature." Cambridge University, Cambridge, England. December 13, 2001.

1. "Lymphocyte-mediated Endothelial Apoptosis." Cambridge University, Cambridge, England. December 13, 2001.
2. "Cardiovascular Protective Effects of Estrogen." Association of University Cardiologists, Phoenix, Arizona. January 10, 2002.
3. "Membrane Estrogen Receptors in Vascular Cells." FASEB Summer Conference on Membrane Steroid Hormone Receptors, Snow Mass, Colorado, June 2002.
4. "Vascular Targets for Molecular Imaging." American Society of Nuclear Cardiology, Squaw Valley, California, July 16, 2002.
5. "Vascular Structure and Function in Cardiovascular Inflammation." Symposium on Inflammation in Myocardial and Coronary Disease. University Hospital San Raffaele, Milan, Italy. October 9, 2002.
6. "Vascular Cell Signaling." American Heart Association Scientific Sessions (Session Chairman), Chicago, Illinois, November 2002.
7. "Immune, Inflammatory and Hormonal Effects on the Endothelium." Massachusetts General Hospital, Boston, Massachusetts. February 10, 2003.
8. Cardiovascular Inflammation-New Approaches to Cardiac Screening." Primary Care Update Conference. Danbury, Connecticut. April 26, 2003.
9. "Immune Responses in Cardiovascular Disease." NHLBI Symposium on Cardiovascular Outcomes in the Era of HAART. Herndon, Virginia, May 7, 2003.
10. "Leukocyte-Endothelial Cell Interactions." University of Virginia, Charlottesville, Virginia. December 8, 2003.
11. "Nongenomic Effects of Estrogen on the Vasculature." Experimental Biology, San Diego, California, April 13, 2003.
12. "Membrane Estrogen Receptors in Vascular Endothelial Cells." Third International Meeting on Rapid Responses to Steroid Hormones. Florence, Italy. September 13, 2003.
13. "Cardiovascular Inflammation." University of Siena, Siena, Italy. September 15, 2003.
14. "Hormonal Effects on the Endothelium." University of Siena, Siena, Italy. September 15, 2003.
15. "Cardiovascular Inflammation." 40th Annual Robert M. Jeresaty Cardiovascular Symposium. Hartford, Connecticut. April 28, 2004.
16. "Molecular Targets for Atherosclerosis Imaging." NIH Cardiovascular Molecular Imaging Symposium (Organizing Committee). Bethesda, Maryland. May 4, 2004.
17. "Integration of Plasma Membrane- and Nuclear-initiated Signaling in Steroid Hormone Action." Session Chair, Vascular Biology. FASEB Summer Research Conference, Tucson, Arizona. July 31-August 05, 2004.
18. "Inflammatory Cytokines and the Cardiovascular System." Workshop on Inflammation, Inflammatory Mediators and Aging. NIH (National Institute on Aging). Bethesda, Maryland. September 2, 2004.
19. "Leukocyte Integrin-dependent Cytokine and Angiogenic Factor Gene Expression." Cambridge University, Cambridge, England. September 22, 2004.
20. "Leukocyte Integrin Effects on Cytokine and Angiogenic Factor Gene Expression through RNA-protein interactions." Boehringer-Ingelheim Pharmaceutical, Ridgefield, Connecticut. October 29, 2004.
21. Hormone Replacement Therapy and Vascular Signaling: The Estrogen Conundrum." Cardiovascular Medicine Grand Rounds, Brigham and Women’s Hospital, Boston, Massachusetts. January 6, 2005.
22. "Leukocyte Integrin-dependent Cytokine and Angiogenic Factor Gene Expression." Vascular Biology Seminar Series, Brigham and Women’s Hospital, Boston, Massachusetts. January 6, 2005.
23. "Truncated vs. Full-length Estrogen Receptors and Rapid Vascular Responses." Co-organizer and Co-chairman, 4th International Meeting on Rapid Responses to Steroid Hormones, San Diego, California, March 28-30, 2005.
24. "HRT and Vascular Cell Signaling: The Estrogen Conundrum." Frank N. Wilson Visiting Professor. University of Michigan, Ann Arbor, Michigan, May 9-10, 2005.
25. "Integrin-dependent Cytokine and Angiogenic Factor Gene Expression: Relevance in Vascular Remodeling and Angiogenesis." Cardiovascular Research Seminar Series. Albert Einstein College of Medicine, Bronx, New York. May 25, 2005.
26. "Membrane Estrogen Receptors in the Cardiovascular System." Rapid Extranuclear Signaling Symposium, Endocrinology 2005. San Diego, California. June 4, 2005.
27. "Endothelial Responses to Estrogen." University of Chicago, October 25, 2005.
28. "Pathways for Damage to the Vasculature." 45th Annual Society of Toxicology Meeting. San Diego, California. March 8, 2006.
29. "New approaches to Vascular Remodeling and Angiogenesis." Cardiology Grand Rounds, Tufts-New England Medical Center, Boston, Massachusetts, May 11, 2006.
30. "Estrogen Receptor Variants and Vascular Responses." FASEB Summer Conference on Mechanisms of Action of Steroid Hormones; Integration of Membrane and Nucleus-initiated Effects. Conference Organizer and Co-Chairman. Tucson, Arizona, July 29-August 3, 2006.
31. "Cytokine and Angiogenic Factor Gene Expression; relevance in vascular remodeling and angiogenesis." Cardiology Grand Rounds, University of Massachusetts Medical School, Worcester, Massachusetts. August 28, 2006.
32. "Integrins and T cell Gene Expression." Vita-Salute San Raffaele University School of Medicine, Milan, Italy. September 6, 2006.
33. "Vascular Cell Signaling by Membrane Estrogen Receptors. NIH Strategic Planning Workshop on Regulation of Inflammatory Responses: Influence of Sex and Gender." Bethesda, Maryland, September 19, 2006.
34. Effect of HuR Gene Deletion in Vascular Pathology Models." Boehringer Ingelheim, Ridgefield, Connecticut, May 9, 2007.
35. "Membrane Estrogen Receptors in the Vascular System." 6th International Meeting on Rapid Responses to Steroid Hormones. Co-Organizer and Session Chairman. Dublin, Ireland, September 2-5, 2007.
36. Cytokine and Angiogenic Factor Gene Expression in Vascular Remodeling and Angiogenesis." Cardiology Grand Rounds, NYU School of Medicine, New York, NY. December 7, 2007.
37. "Endothelial Membrane Estrogen Receptors: Splice Forms and Relevance in Cardiovascular Pathology." State-of-the-Art Presentation at the 35th Annual Meeting of the International Aldosterone Conference. Washington D.C., June 8, 2009.
38. "The Role of Truncated ER in Mediated Vascular Effects." FASEB Summer Conference on Extra-nuclear Steroid Receptors: Integration with Multiple Signaling Pathways. Program Committee Member and Session Chairman, Carefree, Arizona, July 27-August 1, 2008.
39. "Rapid Signaling through Vascular Cell Membrane Estrogen Receptors." Novel Estrogen Receptor Actions Symposium, at the Physiological Society International Meeting, Dublin, Ireland, July 8, 2009.
40. "Hormone and Lipid Effects on Endothelial Activation." Endowed Lectureship, University of Colorado School of Medicine, Denver, Colorado, February 19, 2010.
41. "Localization of Endothelial Membrane Estrogen Receptors." FASEB Summer Research Conference on the Physiology of Integrated Nuclear and Extranuclear Steroid Signaling. August 8-13, 2010.
42. "Transmembrane Endothelial Estrogen Receptors." Rapid Responses to Steroid Hormones, Crete, Greece. September 15, 2011.
43. "Leukocyte Integrin-dependent Gene Expression." Cardiovascular Research Institute Seminar, Morehouse School of Medicine, Atlanta, Georgia, May 9, 2013.
44. "Signaling Surprises in Endothelial Membrane Estrogen Receptors." Speaker and Session Chair, Response to Steroid Hormones International Meeting, Erie, Pennsylvania, September 20, 2013.
45. "Role of Macrophage Integrin-dependent signaling in Ischemia Arteriogenesis." Cardiology Grand Rounds, Columbia School of Medicine, New York, New York, December 3, 2013.
46. "Integrin-dependent Leukocyte Gene Expression in Vascular Remodeling and Angiogenesis." Keynote Lecture, International Cardiovascular 2016 Conference, Manchester England. August 1, 2016.
47. "Effects of estrogen on vascular function and health: Controversies in hormone replacement therapy." Speaker, International Cardiovascular 2016 Conference, Manchester England. August 1, 2016.
48. "Integrin-dependent Leukocyte Gene Expression in Vascular Remodeling and Angiogenesis." Keynote Speaker, South Carolina Medical Student Research Day, Spartanburg, South Carolina, March 30, 2018.

**Professional Service**

***Peer Review Groups/Grant Study Sections:***

1991-1994 American Heart Association (New England Region Peer Review Consortium)

1995 Affiliate Study Group (National Committee) 1995

 1995-1996 National Heart, Lung and Blood Institute Ad Hoc Reviewer and Consultant,

 1996 American Heart Association National Study Section- Vascular Cell Biology

 1997 National Heart, Lung and Blood Institute, Pathology A Study Section Member

 1998 American Heart Association Special Review, Greater Los Angeles Multi-disciplinary Research Program

 1999 National Heart, Lung and Blood Institute, Surgery, Anesthesiology & Trauma (Transplantation) Study Section

2002-2004 National Heart, Lung and Blood Institute, Surgery, Anesthesiology & Trauma (Transplantation) Study Section

2008 National Heart, Lung and Blood Institute, Special Emphasis Panel for K99/R00 Pathway to Independence Awards

2008 American Heart Association Innovative Grant Review Committee

***Journals:***

Editorial Boards

2000- Circulation Research, Circulation, eLife (guest editor)

Reviewer

*2021-2022 Journal of Immunology, Circulation, Cancer Research, Circulation Research, American Journal of Pathology, Journal of Clinical Investigation, Proceedings of National Academy of Sciences, USA, Journal of Cell Biology, American Journal of Physiology, Microcirculation, Nature Medicine, Immunity*

***Professional Organizations:***

1980- Diplomate, National Board of Medical Examiners

1983- Diplomate, American Board of Internal Medicine

1995- Member, Physicians for Social Responsibility

1995- Member, International Society for Heart Transplantation

1986- Diplomate, American Board of Internal Medicine, Cardiovascular Subspecialty Board

1988- American Heart Association, Basic Science and Circulation Councils

1989- Member, American Federation for Clinical Research

1990- Member, American Association of Immunologists

1992- Fellow, American College of Cardiology

1996- American Society for Clinical Investigation

1998- Member, Interurban Clinical Club

2001- Fellow of Council on Basic Cardiovascular Science, American Heart Association

2002- Association of University Cardiologists

2002- Association of American Physicians

2012-2015 Member, American Heart Association National Research Committee

2005-2007 Leadership Development Committee, American Heart Association Heritage Board

2006-2007 Chairman, American Heart Association Heritage Research Committee

2007-2009 Member, American Heart Association Founders Research Committee

2007-2009 Member, American Heart Association Region I Steering Committee

***Yale University/Hospital System:***

Medical School Committees

2002- Member Steering Committee, Interdepartmental Program in Vascular Biology and

 Therapeutics

2002- Attending and Faculty Advisor, Neighborhood Health Project (Yale medical student-run)

2006- Faculty Advisor, Yale Journal of Biology and Medicine

2014- Member, YSM Thesis Awards Committee

2015-2022 Yale School of Medicine Dean's Faculty Advisory Council (Inaugural Chair, 2015-17)

**Bibliography:**

***Peer-Reviewed Original Research***

1. **Bender, J.R.**, Pardi, R., Karasek, M., Engleman, E.: Functional and phenotypic characteristics of lymphocytes that bind human microvascular endothelial cells in vitro. Evidence for preferential binding by natural killer cells. J. Clin. Invest. 79:1679-1688, 1987. PMID:3495552 PMCID: PMC424501
2. Pardi, R., **Bender, J.R**., Engleman, E.: Lymphocyte subsets differentially induce class II human leukocyte antigens on allogeneic microvascular endothelial cells. J. Immunol. 139:2585-2592, 1987. PMID:3116086
3. Damle, N.K., **Bender, J.R**., Doyle, L., Bradley, E.: IL-2 activated human lymphocytes exhibit enhanced adhesion to normal vascular endothelial cells and cause their lysis. J. Immunol. 138:1779-1785, 1987. PMID:3493287
4. Rouse, R.V., Bolin, L.M., **Bender, J.R**., Kyewski, B.A.: Monoclonal antibodies reactive with subsets of mouse and human thymic epithelial cells. J. Histochem. Cytochem. 36:1511-1517, 1988. PMID: 2461413
5. **Bender, J.R**., Pardi, R., Kosek, J., Engleman, E.: Cytotoxic lymphocytes morphologically alter and traverse endothelial cell monolayers. Transplantation. 47:1047-1053, 1989. PMID:2461413
6. Pardi, R., **Bender, J.R**., Dettori, C., Giannazza, E., Engleman, E.: Heterogeneous distribution and transmembrane signaling properties of lymphocyte function associated antigen-1 (LFA-1) in human lymphocyte subsets. J. Immunol. 143:3157-3166, 1989. PMID:2553807
7. **Bender, J.R**., Pardi, R., Engleman, E.: Antigen specific T cell receptor negative natural killer cells cytotoxic for microvascular endothelium. Proc. Natl. Acad. Sci., USA. 87:6949-6953, 1990. PMID: 2402485
8. Suzuki, N., Bianchi, E., Bass., H., Suzuki, T., **Bender, J.R**., Pardi, R., Brenner, C., Larrick, J., Engleman, E.: Natural killer lines and clones with apparent antigen specificity. J. Exp. Med. 172:457-462, 1990. PMCID:PMC2188332
9. **Bender, J.R.**, Tackett, L., Pardi, R.: Endothelial cell class II HLA expression induced by cytotoxic lymphocytes is regulated by genetically determined differences in CD11a/CD18. Transplant. Proc. 23:99-100, 1991. PMID:1671312
10. Pardi, R., **Bender, J.R**.: Signal requirements for the generation of CD4+ and CD8+ T cell responses to human allogeneic microvascular endothelium. Circ. Res. 69:1269-1279, 1991. PMID:1934357
11. Inverardi, L., Samaja, M., Marelli, F., **Bender, J.R**., Pardi, R.: Cellular early immune recognition of xenogeneic vascular endothelium. Transplant. Proc. 24:459-461, 1992. PMID:1566390
12. Pardi, R., Inverardi, L., Rugarli, C., **Bender, J.R**.: Antigen receptor complex stimulation triggers protein-kinase C dependent CD11a/CD18-cytoskeleton association in T lymphocytes. J. Cell. Biol., 116:1211-1220, 1992. PMID: 1346786
13. Inverardi, L., Samaja, M., Motterlini, R., Mangili, F., **Bender, J.R.**, Pardi, R.: Early recognition of a discordant xenogeneic organ by human circulating lymphocytes. Ex vivo studies. J. Immunol. 149:1416-1423, 1992. PMCID:PMC2289356
14. Petzelbauer, P., **Bender, J.R.**, Wilson, J., Pober, J.S.: Heterogeneity of dermal microvascular endothelial cell antigen expression and cytokine responsiveness in situ and in cell culture. J. Immunol. 151:5062-5072, 1993. PMCID:PMC43709
15. **Bender, J.R.**, Sadeghi, M.M., Watson, C., Pfau, S., Pardi, R.: Heterogeneous activation thresholds to cytokines in genetically distinct endothelial cells; evidence for diverse transcriptional responses. Proc. Natl. Acad. Sci, USA. 91:3994-3998 1994. PMCID:PMC43709
16. Haggerty, J., Hough-Monroe, L., Kugelman, L., **Bender, J.R**., Milstone, L.: Epican, a heparin sulfate proteoglycan form of CD44, causes cell-cell adhesion. J. Cell. Sci. 107:3183-3190, 1994. PMID: 7699015
17. Weiss, R.R., Whitaker-Menezes, D., Longley, J., **Bender, J.R**., Murphy, G.F.: Human dermal endothelial cells express membrane-associated mast cell growth factor. J. Invest. Dermatol. 104:101-106, 1995. PMID:7528242
18. Pfau, S., Leitenberg, D., Rinder, H., Smith, B., Pardi, R., **Bender, J.R.**: Lymphocyte adhesion-dependent calcium signaling in human endothelial cells. J. Cell. Biol., 128:969-978, 1995. PMCID:PMC2120392
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***Peer-Reviewed Reviews, Practice* *Guidelines, Standards, and Consensus Statements***

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