

Professional Summary

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Education: B.A. 1968 Brandeis University
Ph.D. 1974 University of Rhode Island

Postdoctoral: 1974-1976 Fellow, Massachusetts Institute of Technology
1976-1977 Fellow, The Salk Institute

Academic Appointments:

1977-1978 Assistant Research Biochemist, UC San Francisco
1978- Research Associate, Children's Hospital Boston
1978-1985 Assistant Professor, Harvard Medical School
1985-1993 Associate Professor, Harvard Medical School
1993- Professor, Departments of Cell Biology and Surgery,
Harvard Medical School
2000- Charles Nowiszewski Professor of Cancer Biology,
Harvard Medical School
2001-2004 Vice President for Research, Children's Hospital Boston
2004-2008 Chief Scientific Officer, Children's Hospital Boston

Research Interests:

Tumor progression and metastasis
Cancer diagnosis and prognosis
Resistance to chemotherapy
Treatment of late-stage tumors

Awards/Honors:

1974-1975	Damon Runyon Memorial Cancer Fund Fellow
1980-1983	Glick-Franzheim Cancer Research Award
1983-1988	American Cancer Society Career Development Award
1988-1996	MERIT Award, National Cancer Institute
1993	Master of Science (Honorary), Harvard University
1997	Chair, Keystone Conference on Motility and Metastasis
1998	Expert Witness, US Senate Cancer Coalition Hearings
1998	Award for Excellence in Teaching, Harvard Medical School
2001-2010	MERIT Award, National Cancer Institute
2011	Prostate Cancer Foundation Creativity Award
2013	Dean's Award, College of the Environment and Life Sciences, University of Rhode Island
2015	Award for Mentoring, Program in Biological and Biomedical Sciences, Harvard Medical School

National Committees:

1986	Faculty Search Committee, Boston Retina Foundation
1987-1991	Member, American Heart Association Grant Review Panel
1989	Organizer, NIH Metastasis Workshop
1990-1993	Member, Executive Council, U.S. Tissue Culture Assn.
1990-1991	Chair, 1991 World Congress, Cell & Tissue Culture
1992-1998	Chair, NASA Grant Review Panel on Cells in Microgravity
1993	Chair, Gordon Conference on Cancer
1993-1998	Board of Directors, American Type Culture Collection
1994	Chair, NIH Study Section on Breast and Prostate Cancer
1994-1998	Member, American Cancer Society Grant Review Panel
1995	Member, NIH Review Panel for Prostate Cancer Centers
1996-2002	Member, American Association for Cancer Research Annual Meeting Program Committee
1996-2003	Reviewer, NIH Pathology Grant Review Panel
1997-1999	Member, Metastasis Research Society Conference Advisory Board
1997	Chair, Keystone Conference on Motility and Metastasis
1998	Reviewer, Dept. of Defense Cancer Grant Review Panel
2001	Member, NIH Oncology Sciences Study Section Panel
2001	Chair, NIH Workshop on Tumor Metastasis
2002	Chair, Dept. of Defense Breast Cancer Grant Review Panel
2003-2006	Chair, NIH Tumor Progression and Metastasis Study Section
2005-	Member, Albert St. Gyorgyi Prize Committee
2006	Member, National Cancer Institute Microenvironment Research Task Force
2006	Chair, American Association for Cancer Research

2008	Conference on Prostate Cancer Chair, American Association for Cancer Research Tumor Microenvironment Working Group
2009- 2010	Member, Tumor Microenvironment Network Chair, Joint Conference: Metastasis Research Society/American Association for Cancer Research Tumor Microenvironment Working Group
2010-2013 2013	AACR Special Conferences Committee Chair, AACR Special Conference in Tumor Invasion and Metastasis
2013	Organizing Committee Member, Global Technology Community: 4 th International Conference on Tumor Progression and Therapeutic Resistance
2014-	Selection Committee, Pershing Square Sohn Prize in Cancer Research
2014	Chair, Fusion Conference on Biology and Treatment of Metastatic Cancer
2015	Chair, AACR Conference on Tumor Metastasis
2016	Chair, Fusion Conference on Novel Concepts in the Biology and Treatment of Metastatic Cancer
2017	Member, Congressional Delegation to Cuba to Promote Biotechnology Exchange
2018	Member, 2018 American Association of Cancer Research Scientific Program Committee

Local Committees:

1986-1990	Curriculum Design Group, Harvard Medical School
1988-2001	Senior Fellow, Cannon Society, HMS
1988-1996	Medical Student Board of Advisors, HMS
1989-1993	Executive Committee, Graduate Program in Cell and Developmental Biology, HMS
1990-1992	Subcommittee for Course Evaluation, HMS
1991-1995	Executive Committee, Training Grant in Organ and Systems Biology, HMS
1991-1997	Chair, Education Committee, Children's Hospital
1992-1993	Committee on Courses and Credits, HMS
1992-1994	Senior Fellow, Harvard-Markey Biomedical Program
1993-1996	Curriculum Committee, HMS
1993-1997	Promotion Committees, HMS
1994	Accreditation Committee, HMS
1995-2001	Board of Advisors, M.D./Ph.D Program, HMS
1994-1996	Fellowship Review Committee, HMS
1996-2001	Fellowship Review Committee, Children's Hospital
1997-2000	Board of Advisors, BBS Graduate Program, HMS
1998-2001	Scientific Integrity Committee, HMS

1999	Planning Committee, Dana Farber/Harvard Cancer Center
1999-2000	Chair, Children's Hospital Animal Care Committee
2000-	Research Executive Committee, Children's Hospital
2001-	Membership Committee, Dana Farber/Harvard Cancer Center
2002-2005	Chair, Research Executive Council, Children's Hospital
2002-	Research Recruitment Committee, Children's Hospital
2002-2005	Committee on Conflicts of Interest, Children's Hospital
2003-2005	Harvard Drug Development Program Executive Committee
2002-2008	Research Space Committee, Children's Hospital
2004-2008	Children's Hospital Internet Advisory Committees
2004	Chair, Children's Hospital Urology Search Committee
2003-2005	Harvard/Allston Research Planning Committee
2005-2008	Research Strategy Committee, Children's Hospital
2006-2008	Board of Trustees Committee on Research, Children's Hospital
2008	Search Committee, Beth Israel Deaconess Hospital
2006-2008	Chair, Research Space Committee, Children's Hospital
2010-	Standing Committee on Conflict of Interest, Harvard Medical School

Editorial Boards:

1986-1995	Invasion and Metastasis
1992-1998	Wound Healing and Regeneration
1993-1999	Oncology Reports
1995-1999	American Journal of Physiology: Heart and Circulatory Physiology
1997-2000	Clinical Cancer Research
1998-2001	The Prostate Journal
2000-2005	BioMedCentral Genetics
2000-	Cancer Biology and Therapy
2005-	Future Oncology
2005-	BioMedCentral Biology
2006-	Cell Motility and Adhesion
2009-2013	Molecular Cancer Research (Senior Editor)
2014-	Journal of Circulating Biomarkers

Board of Directors:

1998-2002	American Type Culture Collection
2017-	Perceptyx Therapeutics

Scientific Advisory Boards:

1993-2002	American Type Culture Collection (Chair, 1999-2000)
1996-1999	Proscript Pharmaceuticals
2000-2005	Glycogenesys
2002-2008	Attenuon, LLC
2002-2009	Synta Pharmaceuticals
2006-2014	Tempo Pharmaceuticals, now Cerulean Pharma (Chair)
2006-2014	Predictive Biosciences (Chair)
2008-2010	BioTrove, Inc. (Chair)
2009-	SynDevRx, Inc (Chair)
2011-???	ProNAi
2012-	Blend Therapeutics/Tarveda
2013-2014	Zestagen SA
2014-2018	Rhode Island Idea Network for Excellence in Biomedical Research (RI-INBRE)
2014-	Pershing Square Foundation
2015-	University of Rhode Island, College of Environment and Life Sciences
2015-	MetaStat
2018-	Platelet Biogenesis

Consulting:

1984-1990	Procyte Inc.
1987-1989	InSite Vision
1988-1992	Alkermes Inc.
1996-2000	Millenium Pharmaceuticals
1996-2001	Shwarz Pharma
1998-2005	Global Medical Products
1999-2001	Angstrom Pharma
1999-2001	Praecis Pharmaceuticals Inc.
1999-2009	Takeda Chemical Industries
2001-2006	NanoPharma/Mersana Pharmaceuticals
2001	Genzyme Corporation
2005-2008	Mersana Therapeutics
2006	Momenta Pharmaceuticals
2008	Johnson and Johnson
2010-	MPM Ventures
2010-	Third Rock Ventures
2011-2013	Mercator Therapeutics
2012-2014	MAKScientific
2017-	Polaris Ventures

Professional Societies:

1979-	American Society for Cell Biology
1985-1990	Tissue Culture Association (Executive Council, 1993-1995)
1986-	American Association for the Advancement of Science
1991-	Metastasis Research Society
1993-	American Association for Cancer Research

Teaching Experience:

1980-	Thesis Supervision, HMS
1982	Lecturer, Mammalian Cell Biology, HMS
1982-1985	Conference Leader, Human Physiology, HMS
1983-1993	Director, Medical Student Journal Group, HMS
1986-1988	Co-director, Advanced Physiology, HMS
1985-1987	Case Discussion Leader, Human Physiology, HMS
1987-1989	Lecturer, General Pathology, HMS
1987-1988	Tutorial Director, Physiology/Biochemistry, HMS
1988-1998	Journal Club Advisor, HMS
1988-1995	Course Director, Physiology/Biochemistry, HMS
1990-1996	Lecturer, Human Cancer, HMS
1990-1997	Lecturer, Human Pathology, HST/HMS
1992-1995	Lecturer, Advanced Physiology, HMS
1993-1997	Lecturer, Biology of the Cancer Cell, HMS
1995-2001	Course Director, Integrated Human Physiology, HMS
2000-2004	Lecturer, Advanced Basic Science, HMS
2002-2004	Lecturer, Pathophysiology, HMS
2007	Lecturer, Nanocourse on the Epithelial to Mesenchymal Transition, HMS

Publications:

1. Cohen PS, Zetter BR, Walsh ML. Evidence that more deoxynucleotide kinase mRNA is transcribed than translated during T4 infection of *Escherichia coli*. *Virology* 1972; 49(3):808-810.
2. Zetter BR, Cohen PS. Post transcriptional regulation of T4 enzyme synthesis. *Arch Biochem Biophys* 1974; 162(2):560-567.
3. Zetter BR, Chen LB, Buchanan JM. Effect of protease treatment on growth, morphology, adhesion, and cell surface proteins of secondary chick embryo fibroblasts. *Cell* 1976; 7(3):407-412.
4. Buchanan JM, Chen LB, Zetter BR. Protease-related effects in normal and transformed cells.

- Cancer Enzymology* 1976; 12:1-24.
5. Gospodarowicz D, Zetter BR. The use of fibroblast and epidermal growth factors to lower the serum requirement for growth of normal diploid cells in early passage: a new method for cloning. *Dev Biol Stand* 1976; 37:109-130.
 6. Zetter BR, Chen LB, Buchanan JM. Binding and internalization of thrombin by normal and transformed chick cells. *Proc Natl Acad Sci USA* 1977; 74(2):596-600.
 7. Zetter BR, Sun TT, Chen LB, Buchanan JM. Thrombin potentiates the mitogenic response of cultured fibroblasts to serum and other growth promoting agents. *J Cell Physiol* 1977; 92(2):233-239.
 8. Buchanan JM, Chen LB, Zetter BR. Reaction of thrombin with fibroblasts and splenocytes. In: Lundblad RL, Mann K, Fenton JW, eds. *Chemistry and Biology of Thrombin*. Ann Arbor: Ann Arbor Press. 1977; 519-530.
 9. Zetter BR, Gospodarowicz D. The effect of thrombin on endothelial cell proliferation. In: Lundblad RL, Fenton JW, Mann KG, eds. *Chemistry and Biology of Thrombin*. Ann Arbor: Ann Arbor Press. 1977; 551-560.
 10. Gospodarowicz D, Brown KD, Birdwell CR, Zetter BR. Control of proliferation of human vascular endothelial cells. Characterization of the response of human umbilical vein endothelial cells to fibroblast growth factor, epidermal growth factor, and thrombin. *J Cell Biol* 1978; 77(3):774-788.
 11. Gospodarowicz D, Greenburg G, Bialecki H, Zetter BR. Factors involved in the modulation of cell proliferation *in vivo* and *in vitro*: the role of fibroblast and epidermal growth factors in the proliferative response of mammalian cells. *In Vitro* 1978; 14(1):85-118.
 12. Buchanan JM, Chen LB, Zetter BR. Are high molecular weight glycoproteins regulators of cellular growth? *Ann N Y Acad Sci* 1978; 312:293-298.
 13. Zetter BR, Johnson LK, Shuman MA, Gospodarowicz D. The isolation of vascular endothelial cell lines with altered cell surface and platelet-binding properties. *Cell* 1978; 14(3):501-509.
 14. Zetter BR, Martin GR. Expression of a high molecular weight cell surface glycoprotein (LETS protein) by preimplantation mouse embryos and teratocarcinoma stem cells. *Proc Natl Acad Sci USA* 1978; 75(5):2324-2328.
 15. Zetter BR, Martin GR, Birdwell CR, Gospodarowicz D. Role of the high-molecular-weight glycoprotein in cellular morphology, adhesion, and differentiation. *Ann N Y Acad Sci* 1978; 312:299-316.
 16. Zetter BR, Chen LB, Buchanan JM. Mitogenic response of cells in tissue culture to thrombin. *Natl Cancer Inst Monograph* 1978; 48:157-165.

17. Zetter BR, Daniels TE, Quadra-White C, Greenspan JS. LETS protein in normal and pathological oral epithelium. *J Dent Res* 1979; 58(1):484-488.
18. Folkman J, Haudenschild CC, Zetter BR. Long-term culture of capillary endothelial cells. *Proc Natl Acad Sci USA* 1979; 76(10):5217-5221.
19. Zetter BR, Antoniades HN. Stimulation of human vascular endothelial cell growth by a platelet-derived growth factor and thrombin. *J Supramol Struct* 1979; 11(3):361-370.
20. Zetter BR. Migration of capillary endothelial cells is stimulated by tumour-derived factors. *Nature* 1980; 285(5759):41-43.
21. Brouty-Boyé D, Zetter BR. Inhibition of cell motility by interferon. *Science* 1980; 208(4443):516-518.
22. Azizkhan RG, Azizkhan JC, Zetter BR, Folkman J. Mast cell heparin stimulates migration of capillary endothelial cells *in vitro*. *J Exp Med* 1980; 152(4):931-944.
23. Coughlin SR, Moskowitz MA, Zetter BR, Antoniades HA, Levine L. Platelet-dependent stimulation of prostacyclin synthesis by platelet-derived growth factor. *Nature* 1980(5791); 288:600-602.
24. Zetter BR, Antoniades HN. Stimulation of human vascular endothelial cell growth by a platelet-derived growth factor and thrombin. In: Hynes R, ed. *Tumor Cell Surfaces and Malignancy*. New York: AR Liss. 1980; 241-250.
25. Zetter BR. The endothelial cells of large and small blood vessels. *Diabetes* 1981; 30(Sup 2): 24-28.
26. Zetter BR, Azizkhan RG, Azizkhan JC, Brouty-Boye D, Folkman J, Haudenschild CC, Klagsbrun M, Potash R, Scheiner J. Normal and tumor-derived factors that modulate endothelial cell growth and migration. In: Bing D, ed. *Plasma and Cellular Modulatory Proteins*. Boston: Center for Blood Research. 1981: 59-74.
27. Chodak GW, Scheiner CJ, Zetter BR. Urine from patients with transitional-cell carcinoma stimulates migration of capillary endothelial cells. *N Engl J Med* 1981; 305(15):869-874.
28. Lopez R, Rand LI, Zetter BR. Absence of mast cells in diabetic retinopathy. *Microvasc Res* 1982; 24(1):87-93.
29. Bernstein LR, Antoniades HN, Zetter BR. Migration of cultured vascular cells in response to plasma and platelet-derived factors. *J Cell Sci* 1982; 56:71-82.
30. Mulliken JB, Zetter BR, Folkman J. *In vitro* characteristics of endothelium from hemangiomas and vascular malformations. *Surgery* 1982; 92(2):348-353.

31. Glassberg MK, Bern MM, Coughlin SR, Haudenschild CC, Hoyer LW, Antoniades HN, Zetter BR. Cultured endothelial cells derived from the human iliac arteries. *In Vitro* 1982; 18(10):859-866.
32. Folkman J, Haudenschild CC, Zetter BR. Capillary endothelial cells: Growth control and differentiation. *Cold Spring Harbor Conferences on Cell Proliferation*. Vol 9: Growth of Cells in Hormonally-Defined Media. New York: Cold Spring Harbor Press. 1982: 509-523.
33. Buzney SM, Massicotte SJ, Hetu N, Zetter BR. Retinal vascular endothelial cells and pericytes: differential growth characteristics *in vitro*. *Invest Ophthalmol Vis Sci* 1983; 24(4):470-480.
34. Azizkhan J, Sullivan R, Azizkhan R, Zetter BR, Klagsbrun M. Stimulation of increased capillary endothelial cell motility by chondrosarcoma cell-derived factors. *Cancer Res* 1983; 43(7):3281-3286.
35. Tapper D, Albert DM, Robinson NL, Zetter BR. Capillary endothelial cell migration: stimulating activity of aqueous humor from patients with ocular cancers. *J Natl Cancer Inst* 1983; 71(3):501-505.
36. Poole TJ, Zetter BR. Stimulation of rat peritoneal mast cell migration by tumor-derived peptides. *Cancer Res* 1983; 43(12):5857-5861.
37. Zetter BR. A new marker for the detection of transitional cell carcinoma. In: Garnick MB, Ritchie JP, eds. *Urologic Cancer: A Multidisciplinary Perspective*. New York: Plenum Medical Book Company. 1983: 229-236.
38. Netland PA, Zetter BR. Tumor cell interactions with blood vessels during cancer metastasis. In: Kaiser HE, ed. *Progressive Stages of Malignant Neo-Plastic Growth*. Dordrecht, The Netherlands: Kluwer Academic Publishers. 1984. Section 94.
39. Netland PA, Zetter BR. Organ-specific adhesion of metastatic tumor cells *in vitro*. *Science* 1984; 224(5):1113-1115.
40. Makris A, Ryan KJ, Yasumizu T, Hill CL, Zetter BR. The nonluteal porcine ovary as a source of angiogenic activity. *Endocrinology* 1984; 115(5):1672-1677.
41. Voyta JC, Via DP, Butterfield CE, Zetter BR. Identification and isolation of endothelial cells based on their increased uptake of acetylated-low density lipoprotein. *J Cell Biol* 1984; 99(6):2034-2040.
42. Zetter BR. Culture of capillary endothelial cells. In: Jaffe EA, ed. *Biology of endothelial cells*. Boston: Martinus Nijhoff. 1984:14-26.
43. Zetter BR, Rasmussen N, Brown L. An *in vivo* assay for chemoattractant activity. *Lab Invest* 1985; 53(3):362-368.

44. Netland PA, Zetter BR. Metastatic potential of B16 melanoma cells after *in vitro* selection for organ-specific adherence. *J Cell Biol* 1985; 101(3):720-724.
45. Netland PA, Zetter BR, Via DP, Voyta JC. *In situ* labelling of vascular endothelium with fluorescent acetylated low density lipoprotein. *Histochem J* 1985; 17(12):1309-1320.
46. Zetter BR. Culture of large vessel endothelial cells. In Freshney RI, ed. *Culture of Animal Cells*. New York, AR Liss, 1986.
47. Netland PA, Zetter BR. Melanoma cell adhesion to defined extracellular matrix components. *Biochem Biophys Res Commun* 1986; 139(2):515-522.
48. Tobias JW, Bern MM, Netland PA, Zetter BR. Monocyte adhesion to subendothelial components. *Blood* 1987; 69(4):1265-1268.
49. Sitaras NM, Sariban E, Pantazis P, Zetter BR, Antoniades HN. Human iliac artery endothelial cells express both genes encoding the chains of platelet-derived growth factor (PDGF) and synthesize PDGF-like mitogen. *J Cell Physiol* 1987; 132:376-380.
50. Zetter BR. Assay of capillary endothelial cell migration. *Methods Enzymol* 1987; 147:135-144.
51. Zetter BR. New assays for cell migration in the process of angiogenesis. In: Garatini S, ed. *Proceedings of the European Economic Council: "New Tests for New Drugs"*. Milan, Witchig Editore Sri, 1987; 85-94.
52. Chung D, Zetter BR, Brodt P. Lewis lung carcinoma variants with differing metastatic specificities adhere preferentially to different defined extracellular matrix molecules. *Invasion and Metastasis* 1988; 8(2):103-117.
53. Silverman KJ, Lund DP, Zetter BR, Lainey LL, Shahood JA, Freiman DG, Folkman J, Barger AC. Angiogenic activity of adipose tissue. *Biochem Biophys Res Commun* 1988; 153(1):347-352.
54. Blood CH, Sasse J, Brodt P, Zetter BR. Identification of a tumor cell receptor for VGVAPG, an elastin-derived chemotactic peptide. *J Cell Biol* 1988; 107(5):1987-1993.
55. Zetter BR. Angiogenesis: state of the art. *Chest* 1988; 93(3S):159-166.
56. Zetter BR. Endothelial heterogeneity: Influence of vessel size, organ localization and species specificity on the properties of cultured endothelial cells. In: Ryan U, ed. *Endothelial Cells*. Boca Raton, CRC Press 1988; Vol 2:63-80.
57. Blood CH, Zetter BR. Membrane-bound protein kinase C modulates receptor affinity and chemotactic responsiveness of Lewis lung carcinoma sublines to an elastin-derived peptide. *J Biol Chem* 1989; 264(18):10614-10620.

58. Chackal-Roy M, Niemeyer C, Moore M, Zetter BR. Stimulation of human prostatic carcinoma cell growth by factors present in human bone marrow. *J Clin Invest* 1989; 84(1):63-70.
59. Yusa T, Blood CH, Zetter BR. Tumor cell interactions with elastin: implications for pulmonary metastasis. *Am Rev Respir Dis* 1989; 140(5):1458-1462.
60. Matsuura N, Zetter BR. Stimulation of mast cell chemotaxis by interleukin 3. *J Exp Med* 1989; 170(4):1421-1426.
61. Zetter BR. The cellular basis of site-specific tumor metastasis. *N Engl J Med* 1990; 322(9):605-612.
62. Blood CH, Zetter BR. Tumor interactions with the vasculature: angiogenesis and tumor metastasis. *Biochem Biophys Acta* 1990; 1032(1):89-118.
63. Zetter BR, Brightman SE. Cell motility and the extracellular matrix. *Curr Opin Cell Biol* 1990; 2(5):850-856.
64. Zetter BR. Cell motility in angiogenesis and tumor metastasis. *Cancer Invest* 1990; 8(6):669-671.
65. Hemler ME, Elices MJ, Chan BMC, Zetter BR, Matsuura N, Takada Y. Multiple ligand binding functions for VLA-2 ($\alpha^2\beta_1$) and VLA-3 ($\alpha^3\beta_1$) in the integrin family. *Cell Differentiation and Development* 1990; 32:229-238.
66. Chan BM, Matsuura N, Takada Y, Zetter BR, Hemler ME. *In vitro* and *in vivo* consequences of VLA-2 expression on rhabdomyosarcoma cells. *Science* 1991; 251(5001):1600-1602.
67. Whalen GF, Zetter BR. Wound healing and angiogenesis. In: Cohen IK, Diegelmann, RF, Lindblad, WJ, eds. *Wound Healing*. Philadelphia, WB Saunders. 1992: 77-95.
68. Meininger CJ, Yano H, Rottapel R, Bernstein A, Zsebo KM, Zetter BR. The *c-kit* receptor ligand functions as a mast cell chemoattractant. *Blood* 1992; 79(4):958-963.
69. Meininger CJ, Zetter BR. Mast cells and angiogenesis. *Semin Cancer Biol* 1992; 3(2):73-79.
70. Rossi MC, Zetter BR. Selective stimulation of prostatic carcinoma cell proliferation by transferrin. *Proc Natl Acad Sci USA* 1992; 89(13):6197-6201.
71. McCormick B, Zetter BR. Adhesive interactions in angiogenesis and tumor metastasis. *Pharmacol Ther* 1992; 53(2):239-260.
72. Zetter BR, Chackal-Roy M, Smith R. The cellular basis for prostate cancer metastasis. In: Karr JP, Yamanaka H, eds. *Prostate Cancer and Bone Metastasis*. New York, Plenum Press, 1992; 39-43.

73. Kantor JD, McCormick B, Steeg PS, Zetter BR. Inhibition of cell motility after *nm23* transfection of human and murine tumor cells. *Cancer Res* 1993; 53(9):1971-1973.
74. Blood CH, Zetter BR. Laminin regulates a tumor cell chemotaxis receptor through the laminin-binding integrin subunit $\alpha 6$. *Cancer Res* 1993; 53(11):2661-2666.
75. Zetter BR. Adhesion molecules in tumor metastasis. *Sem Cancer Biol* 1993; 4(4):219-229.
76. Kundra V, Escobedo JA, Kazlauskas A, Kim HK, Rhee SG, Williams LT, Zetter BR. Regulation of chemotaxis by the PDGF receptor β . *Nature* 1994; 367(6462):474-476.
77. Yenush L, Kundra V, White MF, Zetter BR. Functional domains of the insulin receptor responsible for chemotactic signaling. *J Biol Chem* 1994; 269(1):100-104.
78. Kundra V, Soker S, Zetter BR. Excess early signaling activity inhibits cellular chemotaxis toward PDGF-BB. *Oncogene* 1994; 9(5):1429-1435.
79. Zetter BR, Kundra V. Regulation of metastatic tumor spread. *Resident and Staff Physician* 1994; 40:39-43.
80. Rupnick M, Zetter BR. Cell culture assays for angiogenesis research. *Schering Foundation Conference Proceedings* 1994; 11:125-164.
81. Brightman SE, Blatch GL, Zetter BR. Isolation of a mouse cDNA encoding MTJ1, a new murine member of the DnaJ family of proteins. *Gene* 1995; 153(2):249-254.
82. Meininger CJ, Brightman SE, Kelly KA, Zetter BR. Increased stem cell factor release by hemangioma-derived endothelial cells. *Lab Invest* 1995; 72(2):166-173.
83. Kundra V, Anand-Apte B, Feig LA, Zetter BR. The chemotactic response to PDGF-BB: evidence of a role for Ras. *J Cell Biol* 1995; 130(3):725-731.
84. Dethlefsen SM, Matsuura N, Zetter BR. Mast cell accumulation at sites of murine tumor implantation: implications for angiogenesis and tumor metastasis. *Invasion Metastasis* 1995; 14(1-6):395-408.
85. Smith RC, Litwin MS, Lu Y, Zetter BR. Identification of an endogenous inhibitor of prostatic carcinoma cell growth. *Nat Med* 1995; 1(10):1040-1045.
86. Anand-Apte B, Bao L, Smith R, Iwata K, Olsen BR, Zetter BR, Apte SS. A review of tissue inhibitor of metalloproteinases-3 (TIMP-3) and experimental analysis of its effect on primary tumor growth. *Biochem Cell Biol* 1996; 74:853-862.
87. Kantor JD, Zetter BR. Cell Motility in Breast Cancer. In: Lippmann ME, Dickson R, *Breast Cancer: Cellular and Molecular Biology, Vol V*. Kluwer Academic Publishers. 1996:303-323.

88. Yoshida A, Anand-Apte B, Zetter BR. Differential endothelial migration and proliferation to basic fibroblast growth factor and vascular endothelial growth factor. *Growth Factors* 1996; 13(1-2):57-64.
89. Bao L, Loda M, Janmey PA, Stewart R, Anand-Apte B, Zetter BR. Thymosin β 15: a novel regulator of tumor cell motility upregulated in metastatic prostate cancer. *Nat Med* 1996; 2(12):1322-1328.
90. Lässle M, Blatch GL, Kundra V, Takatori T, Zetter BR. Stress-inducible, murine protein mSTI1. Characterization of binding domains for heat shock proteins and *in vitro* phosphorylation by different kinases. *J Biol Chem* 1997; 272(3):1876-1884.
91. Anand-Apte B, Pepper MS, Voest E, Montsano R, Olsen B, Murphy G, Apte SS, Zetter BR. Inhibition of angiogenesis by tissue inhibitor of metalloproteinase-3. *Investigative Ophthalmology and Visual Science* 1997; 38:817-823.
92. Blatch GL, Lässle M, Zetter BR, Kundra V. Isolation of a mouse cDNA encoding mSTI1, a stress-inducible protein containing the TPR motif. *Gene* 1997; 194(2):277-282.
93. Gold JS, Bao L, Ghossoub RAD, Zetter BR, Rimm DL. Localization and quantitation of expression of the cell motility-related protein thymosin β 15 in human breast tissue. *Mod Pathol* 1997; 10(11):1106-1112.
94. Zetter BR. On target with tumor blood vessel markers. *Nat Biotechnol* 1997; 15(12):1243-4.
95. Anand-Apte B, Zetter BR, Viswanathan A, Qiu RG, Chen J, Ruggieri R, Symons M. Platelet-derived growth factor and fibronectin-stimulated migration are differentially regulated by the Rac and extracellular signal-regulated kinase pathways. *J Biol Chem* 1997; 272(49):30688-30692.
96. Anand-Apte B, Zetter B. Signaling mechanisms in growth factor-stimulated cell motility. *Stem Cells* 1997; 15:259-267.
97. Lässle M, Brightman S, Blatch G, Zetter BR. MTJ1. In: *Guidebook of Molecular Chaperones and Folding Catalysts*. Gething MJ, ed. Oxford University Press. 1997: 129-130.
98. Bao L, Loda M, Zetter BR. Thymosin β 15 expression in tumor cell lines with varying metastatic potential. *Clin Exp Metastasis* 1998; 16(3):227-233.
99. Claesson-Welsh L, Welsh M, Ito N, Anand-Apte B, Soker S, Zetter BR, O'Reilly M, Folkman J. Angiostatin induces endothelial cell apoptosis and activation of focal adhesion kinase independently of the integrin-binding motif RGD. *Proc Natl Acad Sci USA* 1998; 95:5579-5583.
100. Zetter BR. Angiogenesis and tumor metastasis. *Annu Rev Med* 1998; 49:407-424.
101. Banyard J, Zetter BR. The role of cell motility in prostate cancer. *Cancer Metastasis Rev* 1999; 17(4):449-458.

102. Grosskreutz CL, Anand-Apte B, Cuplaa C, Quinn TP, Terman BI, Zetter BR, D'Amore PA. Vascular Endothelial Growth Factor – Induced migration of vascular smooth muscle cells in vitro. *Microvasc Res* 1999; 58:128-136.
103. Koike C, Chao DT, Zetter BR. Sensitivity to polyamine-induced growth arrest correlates with antizyme induction in prostate carcinoma cells. *Cancer Res* 1999; 59(24):6109-6112.
104. Zhu J, Tseng YH, Kantor JD, Rhodes CJ, Zetter BR, Moyers JS, Kahn CR. Interaction of the Ras-related protein associated with diabetes Rad and the putative tumor metastasis suppressor NM23 provides a novel mechanism of GTPase regulation. *Proc Natl Acad Sci USA* 1999; 96(26):14911-14918.
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159. Zetter B, Lake F. Advancing treatment of metastatic cancers: from research to communication--where do we need to go? *Future Oncol.* 2014;10(9):1535-40. PMID: 25145423
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Volumes Edited:

1. *Homing Mechanisms and Cellular Targeting*. Zetter BR, ed. 1994; JAI Press, Greenwich, CT.

Book Prefaces:

1. Zetter, B. *Preface*. In: Cell Adhesion and Invasion in Cancer Metastasis. Pnina Brodt, ed. Georgetown: R.G. Landes Company, 1996.
2. Zetter, B. *Foreword II*. In: Microvascular Research, Volume 1. David Shepro, ed. Boston: Elsevier, 2006. Pg. vii.
3. Zetter, B. *Preface*. In: The Tumor Microenvironment. Rebecca Bagley, ed. Springer Science, 2010.
4. Cancer Biomarkers: Ethics, Economics and Society. Anne Blanchard & Roger Strand. Megaloceros Press, Kokstad, Norway, 2017.

Web Sites Designed:

1. *How cancer grows and spreads*. (<http://www.childrenshospital.org/research/cancer>)

Patents: (excluding amendments and non-US patents)

1. Zetter BR. Cancer diagnostic assay. #4,359,527. Nov. 16, 1982.
2. Zetter BR, Langer RS. Implantable chemoattractant system. # 4,732,155. Mar. 22, 1988.
3. Zetter BR, Bao L. Human thymosin β gene, protein and uses thereof. #5,663,071. Sept. 2, 1997.

4. Zetter BR, Bao L. Human thymosin β 15. #5,721,337. Feb. 24,1998.
5. Zetter BR, Bao L. Human thymosin β 15 gene, protein and uses thereof. #5,831,033. Nov. 3, 1998.
6. Zetter BR, Bao L. Method for prognosis of prostate cancer. #5,858,681. Jan 12, 1999.
7. Zetter BR, Bao L. Human thymosin β 15 gene, protein and uses thereof. #6,017,717. Jan. 25, 2000.
8. Zetter BR, Bao L. Method for diagnosis of cancer. #6,150,117. Nov. 21, 2000.
9. Zetter BR, Bao L. Antibodies specific for human thymosin β 15 protein and uses thereof. #6,300,479. Oct. 9, 2001.
10. Zetter BR, Bao L. Thymosin β 15 promoter and uses thereof. #6,489,463. Dec. 3, 2002.
11. Banyard J, Bao L, Zetter BR. Methods for diagnosis and prognosis of cancer. #7,993,863. Aug. 9, 2011.
12. ElMaleh D, Zetter BR, Weinstein E, Bhisitkul, JB. Biotynilated Compositions. #8,669,236. March 11, 2014.
13. Zetter BR, Feldman A, MacDougall SW. Method for diagnosis and prognosis of epithelial cancers. #8,685,689, April 1, 2014.
14. Zetter BR, Chatterjee SK. Methods to predict and prevent resistance to taxoid compounds. #9,151,758. October 6, 2015.
15. Zetter BR, Holleman A, Chung I. Diagnosis and treatment of taxane-resistant cancers. #9,687,467. June 27, 2017.

Invited Lectures: (2000 – Present; excludes earlier lectures)

1. *Lecturer*, Antigenics Inc., Woburn, MA, January 6, 2000.
2. *Speaker*, Pathology Grand Rounds, Brigham and Women's Hospital, Boston, MA, February 14, 2000.
3. *Speaker*, Global Medical Companies Retreat, Fort Lauderdale, FL, February 24, 2000.
4. *Speaker*, Dept. of Hematology, VA Hospital, Boston, MA, February 27, 2000.
5. *Speaker*, Resident Seminar Series, Lahey Clinic, Burlington, MA, March 1, 2000.
6. *Lecturer*, Dept. of Cell Biology, Univ. Mass. Medical Center, Worcester, MA, March 15, 2000.
7. *Speaker*, National Coalition for Spinal Cord Injury Research, Boston, MA, March 16, 2000.
8. *Discussion Leader*, American Association for Cancer Research Annual Meeting, San Francisco, CA, April 3, 2000.

9. *Symposium Speaker*, International Congress on Immunotherapy, Eilat, Israel, May 4, 2000.
8. *Speaker*, International Symposium on Angiogenesis, Woods Hole, MA, June 17, 2000.
9. *Session Chair*, National Cancer Institute Workshop on Tumor-Stroma Interactions, Bethesda, MD, September 15, 2000.
10. *Lecturer*, Dept. of Biochemistry, University of Nebraska, Omaha, NE, October 23, 2000.
11. *Session Chair*, Boston Angiogenesis Meeting, Boston, MA, November 3, 2000.
12. *Speaker*, Society for Basic Urology Research Conference, Sanibel, FL, November 14, 2000.
13. *Speaker and Moderator*, National Cancer Institute Workshop on Metastasis to Bone, Bethesda, MD, November 30, 2000.
14. *Lecturer*, Department of Cardiology, St. Elizabeth's Hospital, Boston, MA, January 31, 2001.
15. *Lecturer*, Department of Surgery, Beth Israel Deaconess Hospital, Boston, MA, February 13, 2001.
16. *Speaker*, GMP Companies Conference on New Technologies, Fort Lauderdale, FL, February 23, 2001.
17. *Speaker*, Damon Runyon Fund Cancer Research Conference, West Palm Beach, FL, March 5, 2001.
18. *Speaker*, International Conference on Immunology, New York, NY, April 15, 2001.
19. *Speaker*, Society for Pediatric Dermatology Conference, Banff, Canada, June 29, 2001.
20. *Speaker*, Polyamine Gordon Conference, New London, CT, June 28, 2001.
21. *Lecturer*, Pfizer Oncology Division, Groton, CT, July 23, 2001.
22. *Lecturer*, M.D. Anderson Hospital, Houston, TX, October 23, 2001.
23. *Organizer and Speaker*, NCI Workshop on Tumor Metastasis, Washington, DC, December 12-14, 2001.
24. *Lecturer*, Surgical Grand Rounds, Children's Hospital, Boston, MA, February 20, 2002.
25. *Session Chair and Speaker*, American Association For Cancer Research Meeting, San Francisco, CA, April 8, 2002.
26. *Speaker*, International Conference on Immunology, Cannes, France, April 22, 2002.
27. *Lecturer*, Center for Cancer Research, Nice, France, April 24, 2002.
28. *Speaker*, GMP Conference on Medical Technology, Hallandale, FL, April 30, 2002.
29. *Lecturer*, Hershey Medical School, Hershey, PA, May 7, 2002.
30. *Speaker*, International Symposium on Tumor Metastasis, Woods Hole, MA, June 8, 2002.
31. *Speaker*, International Society for Oncofetal Development Mtg, Boston, September 13, 2002.
32. *Lecturer*, Praecis Pharmaceuticals, Waltham, MA, September 19, 2002.
33. *Lecturer*, Neogenesis Pharmaceuticals, Cambridge, MA, September 25, 2002.
34. *Speaker*, Prout's Neck Conference on Prostate Cancer, Prout's Neck, ME, November 9, 2002.
35. *Lecturer*, National Cancer Advisory Board, Bethesda, MD, February 12, 2003.
36. *Speaker*, Expedition Inspiration Conference on Breast Cancer, Sun Valley ID, February 19, 2003.
37. *Speaker*, GMP Scientific Retreat, Fort Lauderdale, FL, March 10, 2003.
38. *Speaker*, Cancer Metastasis Symposium, Dana Farber Cancer Center, Boston, MA, March 14, 2003.
39. *Speaker*, Conference on Bone Metastasis, Boston, MA, May 6, 2003.
40. *Keynote Lecture*, National Cancer Institute New Grantee Conference, Bethesda, MD, May 16, 2003.
41. *Lecturer*, University of Chicago, Department of Urology, Chicago, IL, May 28, 2003.
42. *Speaker*, American Association Of Clinical Chemists, Philadelphia, PA, July 22, 2003.
43. *Lecturer*, Breast Cancer Rounds, Massachusetts General Hospital, October 14, 2003.

44. *Speaker*, International Meeting on Cell Migration, Madrid, Spain, December 2, 2003.
45. *Session Chair*, American Association of Cancer Research, Orlando, FL, March 28, 2004.
46. *Lecturer*, University of Massachusetts Cancer Center, Worcester, MA, April 13, 2004.
47. *Keynote Speaker*, 2004 Hermelin Brain Tumor Symposium of Metastatic Disease, Henry Ford Hospital, Detroit, MI, May 7, 2004.
48. *Speaker*, Reproductive and Cell Biology Seminar Series, MD Anderson Cancer Center, Houston, TX, June 8, 2004.
49. *Lecturer*, 12th Biennial Urologic Cancer Course, Boston, MA, September 24, 2004.
50. *Speaker*, Annual International Meeting on Tumor Progression and Therapeutic Resistance, Philadelphia, PA, November 8, 2004.
51. *Lecturer*, Biology and Pathology Lecture, Boston University, November 16, 2004.
52. *Speaker*, Sharpening Boston's Competitive Edge Conference, Suffolk Law School, Boston, MA, November 17, 2004.
53. *Speaker*, American Association for Cancer Research Prostate Cancer Conference, Bonita Springs, FL, November 18, 2004.
54. *Lecturer*, Steele Laboratories Research Seminar, Massachusetts General Hospital, Boston, MA, February 4, 2005.
55. *Session Chair*, Tumor Progression and Therapy Conference, Boston, MA, September 19, 2005.
56. *Speaker*, Mellon Symposium on Prostate Cancer, Charlottesville, VA, October 22, 2005.
57. *Session Chair*, AACR Conference on Tumor Angiogenesis, Boston, MA, November 12, 2005.
58. *Lecturer*, Karolinska Institute, Stockholm, Sweden, December 8, 2005.
59. *Lecturer*, Pathology Department Lecture, Harvard Medical School, Boston, MA, January 12, 2006.
60. *Lecturer*, Boston Cancer Research Association, Boston, MA, March 15, 2006.
61. *Lecturer*, Genitourinary SPORE Lecture, Harvard Medical School, Boston, MA, May 2, 2006.
62. *Lecturer*, Mary Lowe Lecture, University of Pennsylvania, Philadelphia, PA, May 10, 2006.
63. *Speaker*, ASHE Meeting, Boston, MA, July 11, 2006.
64. *Meeting Chair*, Angiogenesis Therapeutics, Boston, MA, September 19-20, 2006.
65. *Lecturer*, Research Grand Rounds, Moffitt Cancer Center, Tampa, FL, November 29, 2006.
66. *Meeting Chair and Speaker*, AACR Conference on Prostate Cancer, San Francisco, CA, December 6-8, 2006.
67. *Speaker*, Keystone Symposium: Host Cell Interaction and Response to the Cancer Cell, Keystone, CO, January 22-24, 2007
68. *Speaker*, George Washington University, Washington, D.C., February 19, 2007.
69. *Speaker*, Convergence Forum, Martha's Vineyard, MA, June 21-22, 2007.
70. *Speaker*, Massachusetts Legislative Biotech Caucus Forum, Merck Research Laboratories, Boston, MA, October 15, 2007.
71. *Panel Member*, NCI Nanotechnology Alliance Investigators Meeting, Chapel Hill, NC, October 16-18, 2007.
72. *Speaker*, The David Koch Forum, Baltimore, MD, November 12, 2007.
73. *Session Chair*, 9th Annual U.S.-Japan Symposium on Drug Delivery Systems, Maui, HI, December 16-20, 2007.
74. *Participant*, NIH Workshop on Brain Metastasis, Bethesda, MD, January 29, 2008.
75. *Lecturer*, Hollings Cancer Center Medical University of South Carolina, February 27-28, 2008.
76. *Speaker*, The University of Chicago, Chicago, IL, May 28, 2008.
77. *Speaker*, NCI Tumor Microenvironment Network Conference, Seattle, WA, July 8-10, 2008.

78. *Speaker*, Joint Metastasis Research Society-AACR Conference on Metastasis, Vancouver, B.C., Canada, August 3-7, 2008.
79. *Lecturer*, Judah Folkman Memorial Lecture, 14th Biennial Urologic Cancer Course, Boston, MA, October 3, 2008.
80. *Speaker*, Judah Folkman Tribute and Scientific Symposium, Boston, MA, December 5-6, 2008.
81. *Meeting Chair and Speaker*, AACR Special Conference: Advances in Prostate Cancer Research, San Diego, CA, January 21-24, 2009.
82. *Speaker*, The 9th Annual Symposium of Michigan Prostate Research Colloquium, Wayne State University, Detroit, MI, May 30, 2009.
83. *Speaker*, Department of Molecular Physiology and Biophysics, The University of Iowa, June 1, 2009.
84. *Lecturer*, Division of Cancer Medicine Grand Rounds, M.D. Anderson Cancer Center, January 19, 2010.
85. *Lecturer*, Molecular Cell Biology & Genetics Program, Drexel University College of Medicine, May 3, 2010.
86. *Speaker*, Tianjin International Conference on Tumor Microenvironment, Nankai University, Tianjin, China, July 2-4, 2010.
87. *Speaker*, MRS-AACR Joint Conference on Metastasis and the Tumor Microenvironment, Philadelphia, PA, September 12-15, 2010.
88. *Lecturer*, Department of Cell and Molecular Biology, University of Rhode Island, Kingston, RI, April 15, 2011.
89. *Speaker*, Northeast Regional IDeA Program Meeting, Salve Regina University, Newport, RI, August 11, 2011.
90. *Panel Member*, “Lessons Learned in Personalized Medicine in Oncology,” BiopharmAmerica Conference, Boston, MA, September 7, 2011.
91. *Speaker*, Tumor Course: “Critical Issues in Tumor Microenvironment, Angiogenesis and Metastasis: from Bench to Bedside to Biomarkers,” Cambridge, MA, October 4, 2011.
92. *Lecturer*, “Angiogenesis and Tumor Metastasis,” University of Lund, Lund, Sweden, February 3, 2012.
93. *Lecturer*, Annual Judah Folkman Lecture, Children’s Hospital Boston, May 17, 2012.
94. *Speaker*, “New Treatments for Metastatic Cancers,” H Foundation Basic Science Symposium: How Tumors Grow, Northwestern University, Chicago, IL, June 8, 2012.
95. *Speaker*, “Targeting Metastasis,” The Herrenhausen Symposium on Metastasis, Kloster Seeon, Germany, October 10, 2012.
96. *Speaker*, “New Class of Therapies Targeting Lethal Prostate Cancer,” Prostate Cancer Foundation 19th Annual Scientific Retreat, Carlsbad, CA, October 26, 2012.
97. *Chairperson and Session Chairperson*, AACR Special Conference in Tumor Invasion and Metastasis, San Diego, CA, January 20-23, 2013.
98. *Lecturer*, “Novel approaches to the treatment of metastatic cancer,” Pediatric Research Seminar Series, University of Texas MD Anderson Cancer Center, Houston, TX, January 29, 2013.
99. *Chair*, Minisymposium: Role of Microenvironment in Tumor Dormancy and Resistance Niches, AACR Annual Meeting, Washington, DC, April 7, 2013.
100. *Keynote Lecturer*, “New mechanisms and biomarkers of chemoresistance,” CCBIOS Opening Symposium, University of Bergen, Norway, May 30-31, 2013.
101. *Lecturer*, “Novel approaches to the treatment of metastatic cancer,” “The beginning of angiogenesis research: a tribute to Judah Folkman,” and “Mediators of cancer chemoresistance,”

- XVI Pathology Meeting of the A.C. Camargo Cancer Center, São Paulo, Brazil, August 7-10, 2013.
102. *Session Chair*, 12th Annual U.S.-Japan Symposium on Drug Delivery Systems, Maui, HI, December 16-20, 2013.
 103. *Speaker*, “The role of prohibitin in cancer chemoresistance,” The 4th International Conference on Tumor Progression and Therapeutic Resistance, Boston, MA, March 9-11, 2014.
 104. *Speaker and Chairperson*, GTC Biomarker Summit, San Diego, CA, March 19-21, 2014.
 105. *Speaker*, “New approaches to metastatic cancer,” 2nd CCBIO Symposium, Bergen, Norway, March 25-26, 2014.
 106. *Speaker and Chairperson*, “Novel mechanisms of chemoresistance in metastatic cells,” Fusion Conference: Biology and Treatment of Metastatic Cancers, El Jadida, Morocco, September 23-26, 2014.
 107. *Speaker*, “Novel modulators of cancer drug resistance,” Center for Vascular Biology Research Seminar Series, Beth Israel Deaconess Medical Center, Boston, MA, March 18, 2015.
 108. *Co-Chairperson*, AACR Special Conference on Tumor Metastasis, Austin, TX, November 30-December 3, 2015.
 109. *Speaker*, “Novel mechanisms of cancer drug resistance,” Translational Research Seminar Series, Nationwide Children’s Hospital, Columbus, OH, February 19, 2016.
 110. *Session Chairperson and Speaker*, “Markers, mechanisms and treatment of resistant cancer,” Cancer Drug Resistance Modeling and Research Session, Predictive Preclinical Models in Oncology / Molecular Medicine Tri-conference, San Francisco, CA, March 7-9, 2016.
 111. *Speaker*, “New approaches to resistant cancers,” 10th ISMRC International Symposium on Minimal Residual Cancer: Liquid Biopsy in Cancer Diagnostics and Treatment, Hamburg, Germany, March 19-21, 2016.
 112. *Session Chair*, World Preclinical Congress: Latest Advances in Nano-Oncology, Boston, MA, June 14, 2016.
 113. *Speaker and Chairperson*, “Nanoparticle delivery of RNA therapies for the treatment of metastatic cancers,” Fusion Conference: Novel Concepts in the Biology and Treatment of Metastatic Cancer, Paphos, Cyprus, November 5-8, 2016.
 114. *Speaker*, “Systemic nanoparticle-mediated delivery of RNA therapeutics for cancer therapy,” 2nd Global Nanotechnology Congress & Expo, Las Vegas, Nevada, December 1-3, 2016.
 115. *Speaker*, “Why do people die from cancer and how to stop it,” Metastatic Cancer Research Task Force Meeting, Bethesda, Maryland, December 12-13, 2016.
 116. *Speaker*, “Why do people die from cancer and how to stop it,” Vascular Biology Program Work in Progress, Boston, Massachusetts, January 25, 2017.
 117. *Speaker*, “The history and future of cancer research funding,” Student-faculty lunch for Harvard Science Policy Group, Boston, Massachusetts, March 22, 2017.
 118. *Speaker*, “Metastatic cancers: Bringing the science into the clinic,” The Metastatic Niche: Models, Mechanisms and Translating Targets into Therapeutics, Bethesda, Maryland, March 31, 2017.
 119. *Speaker*, “Careers in Cancer Research: Mine and Yours,” Damon Runyon Fellow’s Retreat, Beverly, Massachusetts, September 25, 2017.
 120. *Speaker*, “Careers in Science,” Biology of Cancer: Microenvironment & Metastasis, Cold Spring Harbor, New York, October 10-14, 2017.
 121. *Speaker*, “Treating Metastasis Cancer with RNA Nanoparticles,” Danish Cancer Society Symposium, University of Copenhagen, Copenhagen, Denmark, October 23-25, 2017

122. *Session Chair*, “Novel Methods of Drug Delivery,” the 14th US-Japan Symposium on Drug Delivery Systems, Maui, Hawaii, December 14-18, 2017.
123. *Speaker*, “New Paradigms for the Treatment of Metastatic Cancer in Humans,” Meet-the-Expert Session, AACR 2018 Annual Meeting, Chicago, Illinois, April 14-18, 2018.
124. *Session Chair and Speaker*, “Targeting Aggressive Cancers,” Biology of Tumor Cell Dissemination and Metastasis, 11th International Symposium on Minimal Residual Cancer, Montpellier, France, May 3-5, 2018.
125. *Speaker*, “RNA Therapy in the Treatment of Cancer,” 6th Annual CCBIO Symposium 2018, Centre for Cancer Biomarkers, Bergen, Norway, May 23-25, 2018.
126. *Speaker*, “How Do I Get My New Cancer Therapy into the Clinic and Where Will That Clinic Be?” Pershing Square/Sohn Alliance Retreat 2018, The Pershing Square Foundation, New York, New York, October 23, 2018.