

Mina J. Bissell, Ph.D.

CURRICULUM VITAE

Title: Distinguished Scientist, Life Sciences Division, Lawrence Berkeley National Laboratory
Faculty: Graduate Group in Comparative Biochemistry, Graduate Group in Endocrinology, Graduate Group in Molecular Toxicology, University of California, Berkeley
Faculty: Breast Oncology Program, University of California, San Francisco
Address: Lawrence Berkeley National Laboratory
One Cyclotron Road, MS 977-225A
Berkeley, California 94720
E-mail: mjbissell@lbl.gov
Citizenship: USA

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Bryn Mawr College, Bryn Mawr, PA	Transferred	1959-61	Chemistry
Radcliffe/Harvard College, Cambridge, MA	A.B.	1963	Chemistry (honors)
Harvard University, Cambridge, MA	M.A.	1965	Bacteriology/Biochemistry
Harvard University, Cambridge, MA	Ph.D.	1969	Microbiology/Mol. Genetics

RESEARCH AND PROFESSIONAL EXPERIENCE:

Research Experience and Employment:

Milton Fellow, Harvard Univ. (1969–70); American Cancer Society Fellow (1970–72); Staff Biochemist (1972–76); Senior Staff, LBNL (1976–); Faculty, Graduate Group in Comparative Biochemistry (1979–), Graduate Group in Endocrinology (2001–), Molecular Toxicology (2002–), Univ. of Calif., Berkeley; Visiting Wellcome Prof., Kettering Inst., Univ. of Cincinnati Medical School (1986–88); Director, Cell & Molecular Biology Division, LBNL (1988–92); Director, Life Sciences Division (includes Cell & Molecular Biology Division), LBNL (1992–2002); Associate Director, Biosciences, (1995–2002); Distinguished Scientist (Nov. 2002–); Senior Advisor to the Laboratory Director on Biology (Nov. 2002–).

Awards and Honors (selected):

Medal for Top High School Student in the Country, Iran (1958); Medal of Amer. Inst. of Chemists for Top Chemistry Student at Radcliffe College (1962); Fogarty Senior Fellow (London, 1983–84); First Joseph Sadusk Award for Breast Cancer Research (1985);

Guggenheim Fellow (Paris, 1992-93); ASCB Women in Cell Biology Career Recognition Award (1993); Elected AAAS Fellow (1994); E.O. Lawrence Award, US Dept. of Energy (1996); President, American Society of Cell Biology (ASCB, 1997); Elected, Inst. of Medicine of the National Acad. of Sciences (1997); Exceptional Service Award, OBER, US Dept. of Energy (1997); Mellon Award, University of Pittsburgh (1998); Eli Lilly/Clowes Award of the American Association for Cancer Research (AACR;1999); President, Int'l Society of Differentiation (ISD; 2000–2002); Honorary Doctorate, Pierre & Marie Curie University, Paris, France (2001); Innovator Award in Breast Cancer, US Department of Defense (2002); Elected to the American Academy of Arts and Sciences (2002); Komen Foundation Brinker Award (2003); Discovery Health Channel Medical Honor (2004); Honorary Doctorate, University of Copenhagen (2004); Distinguished Scientist Fellowship Award, OBER, US Dept. of Energy (2005); Ted Couch Lectureship and Award in Cancer Research, H. Lee Moffitt Cancer Center and Research Institute (2007); Pezcoller Foundation–AACR International Award for Cancer Research (2007); Elected to the American Philosophical Society (2007); More than 80 distinguished & named lectures.

National & International Committees and Review Boards (selected):

NIH Molecular Cytology Study Section (1981-85); NIH Gerontology & Geriatrics Review Study Section (1987–89); NIH Pathology B Study Section (1989–92); Board of Directors, Gordon Conferences (1993–98); Chair, 2 Gordon Research Conferences and 2 Keystone Conferences (1993, 96, 98, 05); Secretary of Energy's Advisory Committee BERAC (1995–1999); Chair, BERAC Subcommittee on Application of Genome and Structural Biology (1995); Chair, NASA Committee on the Role of Animal Research in Space (1996–97); Integration Panel, U.S. Army Breast Cancer Research Program (1995–1998); NCI Panel on "Preclinical Models of Cancer" (1997-98); Howard Hughes Medical Inst. Evaluation Panels, Washington, DC (1997/1999); Board of Directors, AACR (1999–2001); U.S. Representative to Council of Scientists, Human Frontier Science Program, Strasbourg, France (1998–2002); Advisory Committee, Burroughs Wellcome Career Awards (1998–2002); Human Rights Committee of National Academies (1999–2005); Institute of Defense Analysis, DSSG, Alexandria, VA (2000–); Advisory Board, Univ. Chicago Cancer Research Center (1998); AACR Science Policy and Legislative Affairs Committees (Current); External Advisory Committees: IBMC, Porto, Portugal (1999–), MIT Center for Environmental Health Sciences (2002–), Breakthrough Breast Cancer, London, UK (2002–), NCI/NCAB Focus Group on Cancer in the Organism (2004), Salk Institute Grant Regulator Program Project; Chair, Group on Cancer and Cancer Biology of the IOM of The National Academies (2005-2007); Member, NIH, Tumor Microenvironment Study Section (2005-); Nominating Committee, AACR (2006-2008).

Associate Editor & Editorial Boards (current only):

Journal of Cell Science (2006-); *Science* (2005-); *The FASEB Journal* (2002-); *International Journal of Cancer* (1999-); *Breast Cancer Research* (1999-; Senior Editor: 2003-); *Molecular Medicine* (1997-); *Journal of Experimental Therapeutics and Oncology* (1995-); *Journal of Mammary Gland Biology* (1995-); *Cell Structure and Function* (1994-); *The Breast*

Journal (1994–); *Molecular Carcinogenesis*(1993–); *In Vitro Cellular and Developmental Biology* (1990–); *Journal of Cellular Biochemistry* (1990-).

Lectures (2005-Present): *Plenary, distinguished and named lectures are marked with an asterisk.*

MEMBERSHIP IN PROFESSIONAL SOCIETIES:

Harvard Chemical Society (1963–present)
American Society for Cell Biology (1974–present)
American Society for Biological Chemistry and Molecular Biology (1977–present)
American Association for the Advancement of Science (1978–present)
Tissue Culture Association (Life Member)
Society for Developmental Biology (1983–present)
American Association for Cancer Research (1988–present)
Sigma XI
International Society of Differentiation (1989–present)
International Society for Matrix Biology (1994–present)
American Society for Matrix Biology, Co-Founder (2000–present)

PATENTS:

Patents Issued: (5)

- United States Patent # 6,753,154: Human AZ-1 Gene, Variants thereof and Expressed Gene Products
- United States Patent # 6,982,151: Design of Novel Assays Based on the Newly Found Role of Dystroglycan and α -Dystroglycan Proteolysis in Tumor Cell Growth
- United States Patent # 5,846,536: Restoration of Normal Function in Cancer Cells
- United States Patent # 6,123,941: Method for Restoration of Normal Phenotype in Cancer Cells
- United States Patent # 6,287,790: Utilization of Nuclear Structure Proteins for Targeted Therapy and Detection of Proliferative and Differentiation Disorder

Patent Pending: (10)

PUBLICATIONS:

(** denotes seminal publications; * denotes noteworthy publications)

- **Bissell MJ.** (1969) Mechanism of excretion of an extracellular enzyme (Coccus P). Ph.D. Thesis, *Harvard University*.
- **Bissell MJ,** Tosi R and Gorini L. (1971) Mechanism of excretion of a bacterial proteinase: factors controlling accumulation of the extracellular proteinase of a Sarcina strain (Coccus P). *J Bacterial* 105(3):1099-1109.

- Sarner NZ, **Bissell MJ**, DiGirolamo L and Gorini L. (1971) Mechanism of excretion of a bacterial proteinase: demonstration of two proteolytic enzymes produced by a *Sarcina* strain (Coccus P). *J Bacteriol* 105(3):1090-1098.
- **Bissell MJ**, Rubin H and Hatie C. (1971) Leakage as the source of overgrowth stimulating activity in Rous sarcoma transformed cultures. *Expt Cell Res* 68(2):404-410.
- **Bissell MJ**, Hatie C and Rubin H. (1972) Patterns of glucose metabolism in normal and virus-transformed cells in tissue culture. *J Natl Cancer Inst* 49(2):555-565.
- ***Bissell MJ**, White RC, Hatie C and Bassham JA. (1973) Dynamics of metabolism of normal and virus-transformed chick cells in culture. *Proc Natl Acad Sci USA* 70(10):2951-2955.
- Bassham JA, **Bissell MJ** and White RC. (1974) Quantitative tracer studies of metabolic dynamics of animal cells growing in tissue culture. *Analyt Biochem* 61:479(2)-491.
- **Bissell MJ**, Hatie C, Tischler AM and Calvin M. (1974) Preferential inhibition of the growth of virus-transformed cells in culture by rifazone-82, a new rifamycin derivative. *Proc Natl Acad Sci USA* 71(6):2520-2524.
- Dolberg DS and **Bissell MJ**. (1974) The side effects of amphotericin B-deoxycholate (fungizone) and nystatin in chick cells in culture. *In Vitro* 10:26-29.
- Dolberg DS, Bassham JA and **Bissell MJ**. (1975) Selective inhibition of the facilitated mode of sugar uptake by cytocharasin B in cultured chick fibroblasts. *Exp Cell Res* 96(1):129-137.
- Rambeck WA, **Bissell MJ** and Bassham JA. (1975) Metabolism in normal and virus-transformed chick embryo fibroblasts as observed with glucose labeled with ¹⁴C and tritium and with tritium labeled water. *Hoppe-Seyler's Z Physiol Chem* 356(2):203-212.
- **Bissell MJ**. (1976) Transport as a rate limiting step in glucose metabolism in virus-transformed cells: studies with cytochalasin B. *J Cell Physiol* 89(4):701-709.
- ****Bissell MJ**, Rambeck WA, White RC and Bassham JA. (1976) Glycerol phosphate shuttle in virus-transformed cells in culture. *Science* 191(4229):856-858.
- DeFrancesco L, Scheffler IE and **Bissell MJ**. (1976) A respiration-deficient Chinese hamster cell line with a defect in NADH-coenzyme Q reductase. *J Biol Chem* 251(15):4588-4595.
- Hawkes SP, Meehan TD and **Bissell MJ**. (1976) The use of fluorescamine as a probe for labeling the outer surface of the plasma membrane. *Biochem Biophys Res Com* 68(4):1226-1233.
- Szabo C, **Bissell MJ** and Calvin M. (1976) Inhibition of infectious Rous virus production by a rifamycin derivative. *J Virology* 18(2):445-453.
- Teng MH, Bartholomew JC and **Bissell MJ**. (1976) Insulin effect on the cell cycle: analysis of the kinetics of growth parameters in confluent chick cells. *Proc Natl Acad Sci USA* 73(9):3173-3177.
- ***Bissell MJ**, Farson D and Tung AS. (1977) Cell shape and hexose transport in normal and virus-transformed cells in culture. *J Supramolecular Structure* 6(1):1-12.
- Brooks GA, **Bissell MJ** and Bassham JA. (1977) Ion-retardation desalting of blood and other animal tissues for separation of soluble metabolites by two-dimensional chromatography. *Analytical Biochem* 83(2):580-588.
- Chin S, **Bissell MJ** and Bassham JA. (1977) The consequences of bisulfite exposure in chick embryo fibroblast in culture. *Bull Environ Contam Toxicol* 18:749-757.

- Neff NT, Ross PA, Bartholomew JC and **Bissell MJ**. (1977) Leucine in cultured cells: its metabolism and use as a marker for protein turnover. *Exp Cell Res* 106(1):175-183.
- *Schwarz RI and **Bissell MJ**. (1977) Dependence of the differentiated state on the cellular environment: Modulation of collagen synthesis in tendon cells. *Proc Natl Acad Sci USA* 74(10):4453-4457.
- **Teng MH, Bartholomew J and **Bissell MJ**. (1977) Synergism between anti-microtubule agents and growth stimulants in enhancement of cell cycle traverse. *Nature* 268:739-741.
- Warshawsky D, Kerns E, **Bissell MJ** and Calvin M. (1977) Characterization of a photoproduct of 7,12-dimethylbenz[alpha]anthracene and its effect on chick-embryo cells in culture. *Biochem J* 164(3):481-486.
- Bissell DM, Levine G and **Bissell MJ**. (1978) Glucose metabolism by adult hepatocytes in primary culture and by cell lines from rat liver. *Am J Physiol* 234(3):C122-C130.
- Hughes AM, Tenforde TS, Calvin M, **Bissell MJ**, Tischler AN and Bennett EL. (1978) Inhibition of adenocarcinoma TA3 ascites tumor growth by rifamycin derivatives. *Oncology* 35(2):76-78.
- Levine GA, **Bissell MJ** and Bissell DM. (1978) Conversion of glucose to sorbitol and fructose by liver-derived cells in culture. *J Biol Chem* 253(17):5985-5989.
- Schwarz RI, Farson DA, Soo WJ and **Bissell MJ**. (1978) Primary avian tendon cells in culture. An improved system for understanding malignant transformation. *J Cell Biol* 79(3):672-679.
- *Szabo C and **Bissell MJ**. (1978) The antiviral action of rifamycin derivative: formation of Rous sarcoma virus particles deficient in 60 to 70S RNA. *J Virol* 25:944-947.
- **Bissell MJ**. (1978) Equality for women scientists. *Grants Magazine* 1:4 331-334.
- **Bissell MJ**, Hatie C and Calvin M. (1979) Is the product of the src gene a promoter? *Proc Natl Acad Sci USA* 76(1):348-352.
- Emerman JT and **Bissell MJ**. (1979) A simple technique for detection and quantitation of lactose synthesis and secretion. *Analyt Biochem* 94(2):340-345.
- Parry G, Soo WJ and **Bissell MJ**. (1979) The uncoupled regulation of fibronectin and collagen synthesis in Rous sarcoma virus transformed avian tendon cells. *J Biol Chem* 254(23):11763-11766.
- Schwarz RI, Farson DA and **Bissell MJ**. (1979) Requirements for maintaining the embryonic state of avian tendon cells in culture. *In Vitro* 15(12):941-948.
- **Bissell MJ**, Bartholomew JC, Folkman J, Smith H and Stampfer M. (1979) Culture systems for studying malignancy. Meeting Report, *Cancer Research* 39:4293-4295 (with 19 other contributors).
- ***Bissell MJ**, Hatie C, Farson DA, Schwarz RI and Soo WJ. (1980) Ascorbic acid inhibits replication and infectivity of avian RNA tumor virus. *Proc Natl Acad Sci USA* 77(5):2711-2715.
- Emerman JT, Bartley JC and **Bissell MJ**. (1980) Interrelationship of glycogen metabolism and lactose synthesis in mammary epithelial cells of mice. *Biochem J* 192(2):695-702.
- **Parry G, Bartholomew JC and **Bissell MJ**. (1980) Role of src gene in growth regulation of Rous sarcoma infected chicken embryo fibroblasts. *Nature* 288:720-722.

- Vessal M, Choun MO, **Bissell MJ** and Bissell DM. (1980) Fructose utilization and altered cytochrome P-450 in cultured hepatocyte from adult rats. *Biochem Biophys Acta* 631:201-210.
- Bartley JC, Emerman JT and **Bissell MJ**. (1981) Metabolic cooperativity between mammary epithelial cells and adipocytes of mice. *Am J Physio* 241:C240-C208.
- ***Bissell MJ**. (1981) The differentiated state of normal and malignant cells or how to define a "normal" cell in culture. *Int Rev Cytol* 70:27-100.
- **Bissell MJ**, Nemethy EK, Riddle L and Calvin M. (1981) Testing for tumor promoters in *Euphorbia lathyris*: analysis of possible health hazards. *Bull Environ Contamination & Toxicol* 27(6):894-902.
- Emerman JT, Bartley JC and **Bissell MJ**. (1981) Glucose metabolic patterns as markers of functional differentiation in freshly isolated and cultured mouse mammary epithelial cells. *Exp Cell Res* 134(1):241-250.
- Laszlo A, Radke K, Chin S and **Bissell MJ**. (1981) Tumor promoters alter gene expression and protein phosphorylation in avian cells in culture. *Proc Natl Acad Sci USA* 78(10):6241-6245.
- *Schwarz RI, Mandell RN and **Bissell MJ**. (1981) Ascorbate induction of collagen synthesis as a means for elucidating a mechanism of quantitative control of tissue-specific function. *Mol Cell Biol* 1(9):843-853.
- ****Bissell MJ**, Hall HG and Parry G. (1982) How does extracellular matrix direct gene expression? *J Theor Biol* 99(1):31-68.
- *Hall HG, Farson DA and **Bissell MJ**. (1982) Lumen formation by epithelial cell lines in response to collagen overlay: a morphogenetic model in culture. *Proc Natl Acad Sci USA* 79(15):4672-4676.
- Hall HG, Farson DA, Chin S and **Bissell MJ**. (1982) Extracellular matrix and morphogenesis: collagen overlay induces lumen formation by epithelial cell lines. In: *The Extracellular Matrix*, pp. 233-238.
- Parry G, Lee E and **Bissell MJ**. (1982) Modulation of the differentiated phenotype of cultured mouse mammary epithelial cells by collagen substrata. In: *The Extracellular Matrix* pp. 303-308.
- Karczmar GS, Koretsky AP, **Bissell MJ**, Klein MP and Weiner MW. (1983) A device for maintaining viable cells at high densities for NMR studies. *J Magnetic Resonance* 53:123-128.
- Laszlo A and **Bissell MJ**. (1983) TPA induces simultaneous alterations in the synthesis and organization of vimentin. *Exp Cell Res* 148(1):221-234.
- **Dolberg DS and **Bissell MJ**. (1984) Inability of Rous sarcoma virus to cause sarcomas in the avian embryo. *Nature* 309(5968):552-556.
- Lee EY, Parry G and **Bissell MJ**. (1984) Modulation of secreted proteins of mouse mammary epithelial cells by the collagenous substrata. *J Cell Biol* 98(1):146-155.
- Packard BS, Saxton MJ, **Bissell MJ** and Klein MP. (1984) Plasma membrane reorganization induced by tumor promoters in an epithelial cell line. *Proc Natl Acad Sci USA* 81(2):449-52.
- **Dolberg DS, Hollingsworth R, Hertle M and **Bissell MJ**. (1985) Wounding and its role in RSV-mediated tumor formation. *Science* 230(4726):676-678.

- Kellie S, Holme TC and **Bissell MJ**. (1985) Interaction of tumor promoters with epithelial cells in culture. An immunofluorescence study. *Exp Cell Res* 160(2):259-74.
- Lee EYH, Lee WH, Kaetzel CS, Parry G and **Bissell MJ**. (1985) Interaction of mouse mammary epithelial cells with collagen substrata: regulation of casein gene expression and secretion. *Proc Natl Acad Sci USA* 82(5):1419-1423.
- Parry G, Lee EY-H, Farson DA, Koval M and **Bissell MJ**. (1985) Collagenous substrata regulate the nature and distribution of glycosaminoglycans produced by differentiated cultures of mouse mammary epithelial cells. *Exp Cell Res* 156(2):487-499.
- Wyke J A, **Bissell MJ**, Gillespie DAF and Levantis P. (1985) The molecular basis for phenotypic modulation in cells containing an integrated viral src oncogene. In: *Dumont JE, Hamprecht B & Nunez J, eds. Hormones and Cell Regulation. Amsterdam, Holland: Elsevier Science Publishers B.V. (Biomedical Division) Volume 9.*
- **Bissell MJ**, Lee EY-H, Li M-L, Chen L-H and Hall HG. (1985) Role of extracellular matrix and hormones in modulation in tissue-specific functions in culture: Mammary gland as a model for endocrine sensitive tissues. In: Rogers CH, Coffey DC, Cunha GR, Grayhack JT, Hunman F and Horton R eds. *Benign Prostatic Hyperplasia, Vol. II* pp. 39-50. *NIH Publication* No. 87-2881.
- Carter VC, Howlett AR, Martin GS and **Bissell MJ**. (1986) The tyrosine phosphorylation substrate p36 is developmentally regulated in embryonic avian limb and is induced in cell culture. *J Cell Biol* 103(5):2017-2024.
- Green AR, Searle S, Gillespie DAF, **Bissell MJ** and Wyke JA. (1986) Expression of integrated Rous sarcoma viruses: DNA rearrangements 5' to the provirus are common in transformed rat cells but not seen in infected but untransformed cells. *EMBO J* 5:4,707-711.
- Hall HG and **Bissell MJ**. (1986) Characterization of the intermediate filament proteins of murine mammary gland epithelial cells. Response to collagen substratum. *Exp Cell Res* 162(2):379-389.
- Levantis P, Gillespie DAF, Hart K, **Bissell MJ** and Wyke JA. (1986) Control of expression of an integrated Rous sarcoma provirus in rat cells: role of 5' genomic duplications reveals unexpected patterns of gene transcription and its regulation. *J Virol* 57:3,907-916.
- **Bissell MJ** and Aggeler J. (1987) Dynamic reciprocity: how do extracellular matrix and hormones direct gene expression? In: *Cabot MC & McKeehan WL, eds. Mechanisms of Signal Transduction by Hormones and Growth Factors. New York: Alan Liss* pp. 251-262.
- **Bissell MJ** and Barcellos-Hoff MH. (1987) The influence of extracellular matrix on gene expression: is structure the message? *J Cell Sci Suppl* 8:327-43.
- Chan LM, Hatier C, Parry G, Werb Z and **Bissell MJ**. (1987) Collagen-fibronectin interactions in normal and Rous sarcoma virus transformed avian tendon cells: possible mechanism for increased extracellular matrix turnover after transformation. *In Vitro* 23(4):308-314.
- Chen LH and **Bissell MJ**. (1987) Transferrin mRNA level in the mouse mammary gland is regulated by pregnancy and extracellular matrix. *J Biol Chem* 262(36):17247-17250.
- Howlett AR, Cullen B, Hertle M and **Bissell MJ**. (1987) Tissue tropism and temporal expression of Rous sarcoma virus in embryonic avian limb in ovo. *Oncogene Res* 1:255-263.

- Lee EY, Barcellos-Hoff MH, Chen LH, Parry G and **Bissell MJ**. (1987) Transferrin is a major mouse milk protein and is synthesized by mammary epithelial cells. *In Vitro* 23(3):255-263.
- *Li ML, Aggeler J, Farson DA, Hatier C, Hassell J and **Bissell MJ**. (1987) Influence of a reconstituted basement membrane and its components on casein gene expression and secretion in mouse mammary epithelial cells. *Proc Natl Acad Sci USA* 84(1):136-140.
- Medina D, Li ML, Oborn CJ and **Bissell MJ**. (1987) Casein gene expression in mouse mammary epithelial cell lines: dependence upon extracellular matrix and cell type. *Exp Cell Res* 172(1):192-203.
- Smith HS and **Bissell MJ**. (1987) Cancer at the cellular level. *Cancer Res* 47:3337-3338.
- Stoker AW and **Bissell MJ**. (1987) Quantitative immunocytochemical assay for infectious avian retroviruses. *J Gen Virol* 68:2481-2485.
- **Bissell MJ**, Li M-L, Chen L-H and Lee EY-H. (1987) Regulation of milk proteins in the mouse mammary epithelial Cells by extracellular matrix and hormones. In: *Enami J & Ham R, eds. Growth and Differentiation of Mammary Epithelial Cells in Culture*. Tokyo, Japan: Japan Scientific Societies Press, pp. 155-186.
- **Bissell MJ** and Hall HG. (1987) Form and function in the mammary gland: The role of extracellular matrix. In: *Nevell MC & Neville CWD, ed. The Mammary Gland: Development, Regulation and Function*. New York: Plenum Publishing Corp. pp. 97-146.
- Aggeler, J, Park CS and **Bissell MJ**. (1988) Regulation of milk protein and basement membrane gene expression: the influence of the extracellular matrix. *J Dairy Science* 71(10):2830-2842.
- *Howlett AR, Carter VC, Martin GS and **Bissell MJ**. (1988) pp60v-src tyrosine kinase is expressed and active in sarcoma-free avian embryos microinjected with Rous sarcoma virus. *Proc Natl Acad Sci USA* 85(20):7587-7591.
- Parry G, Farson D, Cullen B and **Bissell MJ**. (1988) p-nitrophenyl-b-D-xyloside modulates proteoglycan synthesis and secretory differentiation in mouse mammary epithelial cell cultures. *In Vitro* 24(12):1217-1222.
- *Stoker AW and **Bissell MJ**. (1988) Development of avian sarcoma and leukosis virus-based vector-packaging cell lines. *J Virology* 62(3):1008-1015.
- **Bissell MJ** and Aggeler J. (1988) Regulation of tissue specific gene expression in the mammary gland: The role of extracellular matrix. In: *Rich MA, Hager JC & Lopez DM, eds. Breast Cancer: Scientific & Clinical Progress*. Boston, MA: Kluwer Academic Publishers, pp. 127-141.
- Emerman JT and **Bissell MJ**. (1988) Cultures of mammary epithelial cells: Extracellular matrix and functional differentiation. In: *Maramorosch K & Sato GH, eds. Advances in Cell Culture*. San Diego, CA: Academic Press, Inc. pp. 137-155.
- **Bissell MJ**, Ram TG, Chen L. (1988) Regulation of gene expression by extracellular matrix in higher eukaryotes. In: *Gene Expression and Regulation: The Legacy of Luigi Gorini*, pp. 279-287.
- **Barcellos-Hoff MH, Aggeler J, Ram TG and **Bissell MJ**. (1989) Functional differentiation and alveolar morphogenesis of primary mammary cultures on reconstituted basement membrane. *Development* 105(2):223-235.

- Chen LH and **Bissell MJ**. (1989) A novel regulatory mechanism for whey acidic protein gene expression. *Cell Regulation* 1(1):45-54.
- **Bissell MJ** and Ram TG. (1989) Regulation of functional differentiation and histogenesis in mammary epithelial cells: role of the extracellular matrix. In: Jetten AM, ed. Environmental Health Perspectives. Bethesda, MD: *NIH Publication*, Vol. 80 pp. 61-70.
- Barcellos-Hoff MH and **Bissell MJ**. (1989) Mammary epithelial cells as a model for studies of regulation of gene expression. In: *Matlin K & Valentich JD, eds. Functional Epithelial Cells in Culture*. New York, NY: Alan R. Liss, Inc., pp. 399-433.
- Barcellos-Hoff MH and **Bissell MJ**. (1989) A role for the extracellular matrix in autocrine and paracrine regulation of gene expression. In: *Krey L, Gulyas BJ & McKraken M, eds. Paracrine and Autocrine Factors in Reproductive Endocrinology*. New York, NY: Plenum Publishing Corporation, pp. 137-155.
- Sieweke MH, Stoker AW and **Bissell MJ**. (1989) Evaluation of the cocarcinogenic effect of wounding in Rous sarcoma virus tumorigenesis. *Cancer Res.* 49(22):6419-6424.
- Auersperg N, MacLaren IA and **Bissell MJ**. (1990) V-K-ras transformation induces reversion to an earlier developmental form in adult rat adrenal cells. *Differentiation* 43(1):29-36.
- *Martins-Green M and **Bissell MJ**. (1990) Localization of 9E3/CEF-4 in avian tissues: expression is absent in Rous sarcoma virus-induced tumors but is stimulated by injury. *J Cell Biol* 110(3):581-595.
- *Schmidhauser C, **Bissell MJ**, Myers CA and Casperson GF. (1990) Extracellular matrix and hormones transcriptionally regulate bovine β -casein 5' sequences in stably transfected mouse mammary cells. *Proc Natl Acad Sci USA* 87:9118-9122.
- **Sieweke MH, Thompson NL, Sporn MB and **Bissell MJ**. (1990) Mediation of wound-related Rous sarcoma virus tumorigenesis by TGF- β . *Science* 248(4963):1656-1660.
- *Stoker AW, Hatier C and **Bissell MJ**. (1990) The embryonic environment strongly attenuates v-src oncogenesis in mesenchymal and epithelial tissues, but not in endothelia. *J Cell Biol* 111(1):217-228.
- *Streuli CH and **Bissell MJ**. (1990) Expression of extracellular matrix components is regulated by substratum. *J Cell Biol* 110(4):1405-1415.
- Stoker AW, Streuli CH, Martins-Green M and **Bissell MJ**. (1990) Designer microenvironments for the analysis of cell and tissue function. In: *Bernfeld M & Damsky C, eds. Curr Opin Cell Biol*. London, England: Current Science Ltd., Vol. 2/5, pp. 864-874.
- Howlett AR and **Bissell MJ**. (1990) Regulation of mammary epithelial cell function: A role for stromal and basement membrane matrices. In: *Keenan TW, ed. Stuart Patton Commemorative Issue of Protoplasma*. Secaucus, NJ: Springer-Verlag New York, Inc., pp. 85-95.
- **Bissell MJ**. (1990) Mammary gland as a model for studies of gene expression in normal and malignant cells. In: *Effects of Therapy on Biology and Kinetics of the Residual Tumor*, Par A: Pre-clinical Aspects. Wiley-Liss. pp. 313-316.
- Aggeler J, Ward J, Blackie LM, Barcellos-Hoff MH, Streuli CH and **Bissell MJ**. (1991) Cytodifferentiation of mouse mammary epithelial cells on a reconstituted basement membrane reveals striking similarities to development in vivo. *J Cell Sci* 99:407-417.

- *Martins-Green M, Tilley C, Schwarz R, Hatier C and **Bissell MJ**. (1991) Wound-factor-induced and cell cycle phase-dependent expression of 9E3/CEF4, the avian gro gene. *Cell Regulation* 2(9):739-752.
- Reddy ST, Stoker AW and **Bissell MJ**. (1991) Expression of Rous sarcoma virus-derived retroviral vectors in the avian blastoderm: potential as stable genetic markers. *Proc Natl Acad Sci USA* 88(23):1558-1562.
- **Streuli CH, Bailey N and **Bissell MJ**. (1991) Control of mammary epithelial differentiation: basement membrane induces tissue-specific gene expression in the absence of cell-cell interaction and morphological polarity. *J Cell Biol.* 115(5):1383-95. [Selected as one of the Landmark Papers in Cell Biology (Joseph G. Gall and J. Richard McIntosh, eds.). pp. 336-348 (2001) *Cold Spring Harbor Laboratory Press*, Cold Spring Harbor, NY, and the American Society for Cell Biology, Bethesda, MD.]
- *Talhok RS, Chin JS, Unemori EN, Werb Z and **Bissell MJ**. (1991) Proteinases of the mammary gland: developmental regulation in vivo and vectorial secretion in culture. *Development* 112(2):439-449.
- **Bissell MJ**, Howlett AR and Streuli CH. (1991) Extracellular matrix (ECM) guides tissue-specific function and developmental processes. In: *Parker, S. P., ed. The McGraw-Hill Yearbook of Science & Technology*. New York, NY: McGraw-Hill.
- Schmidhauser C, Casperon GF, Myers CA and **Bissell MJ**. (1991) Extracellular matrix and hormones regulate bovine β -casein gene 5' sequences in stably transfected mouse mammary cells. In: Lippman M & Mihich H, eds. *The Therapeutic Implications of the Molecular Biology of Breast Cancer*. Rome, Italy: Centro Italiano Congressi, *Proceedings of the Second Pezcoller Foundation Symposium*, pp. 121-133.
- Streuli CH and **Bissell MJ**. (1991) Mammary epithelial cells, extracellular matrix, and gene expression. In: Lippman, M, Dickson R, eds. *Regulatory Mechanisms in Breast Cancer*. Norwell, MA: *Kluwer Academic Publishers*, pp. 365-381.
- Dale TC, Krnacik MJ, Schmidhauser C, Yang CL, **Bissell MJ** and Rosen JM. (1992) High level expression of the rat whey acidic protein gene is mediated by elements in the promoter and 3' untranslated region. *Mol Cell Biol* 12(3):905-914.
- Martins-Green M, Aotaki-Keen A, Hjelmeland LM and **Bissell MJ**. (1992) The 9E3 protein: immunolocalization in vivo and evidence for multiple forms in culture. *J Cell Sci* 101:701-707.
- Parry G, J Li, Stubbs J, **Bissell MJ**, Schmidhauser C, Spicer AP and Gendler SJ. (1992) Studies of Muc-1 mucin expression and polarity in the mouse mammary gland demonstrate developmental regulation of Muc-1 glycosylation and establish the hormonal basis for mRNA expression. *J Cell Sci* 101:191-199.
- **Petersen OW, Rønnov-Jessen L, Howlett AR and **Bissell MJ**. (1992) Interaction with basement membrane serves to rapidly distinguish growth and differentiation pattern of normal and malignant human breast epithelial cells. *Proc Natl Acad Sci USA* 89(19):9064-9068.
- **Schmidhauser C, Casperon GF, Myers CA, Sanzo KT, Bolten S and **Bissell MJ**. (1992) A novel transcriptional enhancer is involved in the prolactin- and extracellular matrix-dependent regulation of β -casein gene expression. *Mol Cell Biol* 3(6):699-709.
- Talhok RS, **Bissell MJ** and Werb Z. (1992) Coordinated expression of extracellular matrix-degrading proteinases and their inhibitors regulates mammary epithelial function during involution. *J Cell Biol* 118(5):1271-1282.

- Werb Z, Talhouk R, Simpson C, Alexander C, **Bissell MJ**. (1992) The role of metalloproteinases and their inhibitors in tissue remodeling in the mammary gland. In: *Tissue Injury and Proteases*, pp. 177-182.
- Talhouk RS, Streuli CH, Barcellos-Hoff MH and **Bissell MJ**. (1993) The extracellular matrix. In: *Bittar EE, ed. Fundamentals of Medical Cell Biology*. Greenwich, CT: JAI Press, Inc., pp. 137-178.
- Desprez P-Y, Roskelley CD, Campisi J and **Bissell MJ**. (1993) Isolation of functional cell lines from a mouse mammary epithelial cell strain: The importance of basement membrane and cell-cell interaction. *Mol Cell Differentiation* 1:99-110.
- Howlett AR and **Bissell MJ**. (1993) The influence of tissue microenvironment (stroma and extracellular matrix) on the development and function of mammary epithelium. *Epith Cell Biol* 2(2):79-89.
- Jones PL, Schmidhauser C and **Bissell MJ**. (1993) Regulation of gene expression and cell function by extracellular matrix. *Crit Rev Eukaryot Gene Expr* 3(2):137-154.
- Lin CQ and **Bissell MJ**. (1993) Multi-faceted regulation of cell differentiation by extracellular matrix. *FASEB J* 7(9):737-743.
- Streuli CH, Schmidhauser C, Kobrin M, **Bissell MJ** and Derynck R. (1993) Extracellular matrix regulates expression of the TGF- β 1 gene. *J Cell Biol* 120:253-260.
- **Bissell MJ**. (Ed.) (1993) Form and Function in the Epithelia. In: *Seminars in Cell Biol.* London, England: Saunders Scientific Publications/Academic Press, June.
- **Bissell MJ** and Wicha MS. (1993) Extracellular matrix is required for milk protein gene expression and secretion in mammary epithelial cells. In: *Houdebine LM, ed., Biology of Lactation*. France: INRA.
- Talhouk RS, Werb Z and **Bissell MJ**. (1993) Functional interplay between ECM and ECM-degrading proteinases in the mammary gland: A coordinate system for regulating mammary epithelium function. In: *Fleming T, ed. Epithelial Organization and Development*. London, England: Chapman and Hall.
- Roskelley CD, Petersen OW and **Bissell MJ**. (1993) The significance of the extracellular matrix in mammary epithelial carcinogenesis. In: Heppner G, ed. Greenwich, CT: JAI Press, Inc., *Biology of the Cancer Cell*.
- Blashke RJ, Howlett AR, Desprez PY, Petersen OW and **Bissell MJ** (1994). Cell differentiation by extracellular matrix components. In: Ruoslahti, E & Engvall, E, eds. Extracellular Matrix Components: *Methods in Enzymology*. Academic Press Vol. 245, pp. 535-569.
- *Howlett AR, Petersen OW, Steeg PS and **Bissell MJ**. (1994) A novel function for the nm23-H1 gene: overexpression in human breast carcinoma cells leads to the formation of basement membrane and growth arrest. *J Natl Cancer Inst* 86(24):1838-1844.
- Martins-Green M, Boudreau N and **Bissell MJ**. (1994) Inflammation is responsible for the development of wound-induced tumors in chickens infected with Rous sarcoma virus. *Cancer Res* 54(16):4334-4341.
- Schmidhauser C, Casperson GF and **Bissell MJ**. (1994) Transcriptional activation by viral enhancers: critical dependence on extracellular matrix-cell interactions in mammary epithelial cells. *Mol Carcinogen* 10(2):66-71.
- *Simpson CJ, Talhouk RS, Alexander CM, Chin JR, Clift SM, **Bissell MJ** and Werb Z. (1994) Targeted expression of stromelysin-1 in mammary gland provides evidence for a

role of proteinases in branching morphogenesis and the requirement for an intact basement membrane for tissue-specific gene expression. *J Cell Biol* 125(3):681-693.

- *Roskelley CD, Desprez P-Y and **Bissell MJ**. (1994) Extracellular matrix dependent tissue-specific gene expression in mammary epithelial cells requires both physical and biochemical signal transduction. *Proc Natl Acad Sci USA* 91:12378-12382.
- Ashkenas J, Damsky CH, **Bissell MJ** and Werb Z. (1994) Integrins, signaling and the remodeling of the extracellular matrix. In: Cheresch D & Mecham R, eds. *The Integrins. Academic Press* pp. 79-109.
- Sieweke M and **Bissell MJ**. (1994) The tumor promoting effect of wounding: A possible role for TGF- β -induced stromal alterations. *Critical Rev in Oncogenesis* 5(2&3):297-311.
- **Boudreau N, Sympson CJ, Werb Z and **Bissell MJ**. (1995) Suppression of ICE and apoptosis in mammary epithelial cells by extracellular matrix. *Science* 267(5199):891-893.
- Desprez PY, Hara E, **Bissell MJ** and Campisi J. (1995) Suppression of mammary epithelial cell differentiation by the helix-loop-helix protein Id-1. *Mol Cell Biol* 15(6):3398-3404.
- Howlett AR, Bailey N, Damsky C, Petersen OW and **Bissell MJ**. (1995) Cellular growth and survival are mediated by β -1 integrins in normal human breast epithelium but not in breast carcinoma. *J Cell Sci* 108:1945-1957.
- Jones PL, Boudreau N, Meyers CA, Erickson HP and **Bissell MJ**. (1995) Tenascin-C inhibits extracellular matrix-dependent gene expression in mammary epithelial cells. Localization of active regions using recombinant tenascin fragments *J Cell Science* 108:519-527.
- Lin CQ, Dempsey PJ, Coffey RJ and **Bissell MJ**. (1995) Extracellular matrix regulates whey acidic protein gene expression by suppression of TGF- α in mouse mammary epithelial cells: studies in culture and in transgenic mice. *J Cell Biol* 129(4):1115-1126.
- Petersen OW, Rønnev-Jessen L and **Bissell MJ**. (1995) The microenvironment of the breast: Three-dimensional models to study the roles of the stroma and the extracellular matrix in function and dysfunction. *Breast Journal* 1:22-35.
- *Rønnev-Jessen L, Petersen OW, Kotelianski VE and **Bissell MJ**. (1995) The origin of the myofibroblasts in breast cancer. Recapitulation of tumor environment in culture unravels diversity and implicates covered fibroblasts and recruited smooth muscle cells. *J Clinical Investigation* 95(2):859-873.
- Roskelley CD, Srebrow A, **Bissell MJ**. (1995) A hierarchy of ECM-mediated signalling regulates tissue-specific gene expression. Roskelley CD, *Current Opinion in Cell Biol* 7(5):736-747.
- *Streuli CH, Schmidhauser C, Bailey N, Yurchenco P, Skubitz AP, Roskelley C and **Bissell MJ**. (1995) Laminin mediates tissue-specific gene expression in mammary epithelia. *J Cell Biol* 129(3):591-603.
- **Bissell MJ** and Werb Z, eds. (1995) Introduction: basic science aspects of breast cancer. *Seminars in Cancer Biol* 6(3):117-118.
- Sympson CJ, **Bissell MJ**, Werb Z. (1995) Mammary gland tumor formation in transgenic mice over-expressing stromelysin-1. *Semin Cancer Biol* 6(3):159-63

- Weaver VM, Howlett AR, Langston-Weber B, Petersen OW and **Bissell MJ**. (1995) The development of a functionally relevant cell culture model of progressive human breast cancer. *Seminars in Cancer Biol* 6(3):175-184.
- Boudreau N, Myers C and **Bissell MJ**. (1995) From laminin to lamin: regulation of tissue-specific gene expression by the ECM. *Trends Cell Biol* 5(1):1-4.
- Boudreau N, Reddy ST, Stoker AW, Fairman C and **Bissell MJ**. (1995) The embryonic environment and the extracellular matrix suppress oncogenic transformation by Rous sarcoma virus in the chick embryo. *Mol Cell Differ* 3:261-274.
- Lochter A and **Bissell MJ**. (1995) Involvement of extracellular matrix constituents in breast cancer. *Semin Cancer Biol* 6(3):165-173.
- Martins-Green M and **Bissell MJ**. (1995) Cell-ECM interactions in development. *Seminars in Develop Biol* 6:149-159.
- Roskelley CD and **Bissell MJ**. (1995) Dynamic reciprocity revisited: a continuous, bidirectional flow of information between cells and the extracellular matrix regulates mammary epithelial cell function. *Biochem. Cell Biology* 73(7-8): 391-397.
- Schmidhauser C, Myers CA, Mossi R, Casperson C, and **Bissell MJ**. (1995) Extracellular matrix dependent gene regulation in mammary epithelial cells. In: *Wilde CJ et al., eds. Intercellular Signalling and the Mammary Gland*. New York: Plenum Press. pp. 107-119.
- Sympton CJ, Talhouk R, **Bissell MJ**, and Werb Z. (1995) The role of metalloproteinases and their inhibitors in regulating mammary epithelial morphology and function in vivo. *Perspectives in Drug Discovery and Design* 2:3 401-411.
- Alexander CM, Howard EW, **Bissell MJ** and Werb Z. (1996) Rescue of mammary epithelial cell apoptosis and entactin degradation by a tissue inhibitor of metalloproteinases-1 transgene. *J Cell Biol* 135:6:1669-1677.
- Boudreau N. and **Bissell MJ**. (1996) Regulation of gene expression by the extracellular matrix. In: Comper WD, ed. *Extracellular Matrix, Volume 2, Molecular Components and Interactions*. Overseas Publishers Association., pp. 246-261.
- Boudreau N, Werb Z and **Bissell MJ**. (1996) Suppression of apoptosis by basement membrane requires three-dimensional tissue organization and withdrawal from the cell cycle. *Proc Natl Acad Sci USA* 93(8):3509-3513.
- Lund LR, Romer J, Thomasset N, Solberg H, Pyke C, **Bissell MJ**, Dano K and Werb Z. (1996) Two distinct phases of apoptosis in mammary gland involution: proteinase-independent and -dependent pathways. *Development* 122:181-193.
- *Rønnev-Jessen L, Petersen OW and **Bissell MJ**. (1996) Cellular changes involved in conversion of normal to malignant breast: importance of the stromal reaction. *Physiol Revs* 76(1):69-125.
- Chen H, Weaver VM, Petersen OW and **Bissell MJ**. (1996) Extracellular matrix as a central regulator of function, growth and programmed death in breast cells of both mice and men: Implications for therapy. *Proc Pezcoller Found* 7:2-10.
- Lelièvre S, Weaver VM and **Bissell MJ**. (1996) Extracellular matrix signaling from the cellular membrane skeleton to the nuclear skeleton: a model of gene regulation. *Rec Prog Hormone Res* 51:417-432.

- Werb Z, Simpson CJ, Alexander CM, Thomasset N, Lund LR, MacAuley A, Ashkenas J and **Bissell MJ**. (1996) Extracellular matrix remodeling and the regulation of epithelial-stromal interactions during differentiation and involution. *Kidney Intl* 49:S68-S74.
- Weaver VM, Fischer AH, Petersen OW, and **Bissell MJ**. (1996) The importance of the microenvironment in breast cancer progression: recapitulation of mammary tumorigenesis using a unique human mammary epithelial cell model and a three-dimensional culture assay. *Biochem. Cell Biology* 74(6): 833-851.
- Ashkenas J, Muschler J and **Bissell MJ**. (1996) The extracellular matrix in epithelial biology: shared molecules and common themes in distant phyla. *Dev Biol* 180(2):433-444.
- **Bissell MJ**. (1997) The central role of basement membrane in functional differentiation, apoptosis and cancer. In: Tilly JL, Strauss III JF & Tenniswood M, eds. *Cell Death in Reproductive Physiology. Serono Symposia USA*, pp. 125-140.
- Lelièvre SA, Weaver VM, Larabell CA and **Bissell MJ**. (1997) Extracellular matrix and nuclear matrix interactions may regulate apoptosis and tissue-specific gene expression: A concept whose time has come. *Adv in Mol Cell Biol* 24:1-55.
- **Lochter A, Galosy S, Muschler J, Freedman N, Werb Z and **Bissell MJ**. (1997) Matrix metalloproteinase stromelysin-1 triggers a cascade of molecular alterations that leads to stable epithelial-to-mesenchymal conversion and a premalignant phenotype in mammary epithelial cells. *J Cell Biol* 139(7):1861-1872.
- Lochter A, Srebrow A, Simpson CJ, Terracio N, Werb Z and **Bissell MJ**. (1997) Misregulation of stromelysin-1 expression in mouse mammary tumor cells accompanies acquisition of stromelysin-1-dependent invasive properties. *J Biol Chem* 272(8):5007-5015.
- Pujuguet P and **Bissell MJ**. (1997) Dynamic reciprocity: The extracellular matrix and the molecular dialogue. *Helix* 6:16-25.
- **Weaver VM, Petersen OW, Wang F, Larabell CA, Briand P, Damsky C and **Bissell MJ**. (1997) Reversion of the malignant phenotype of human breast cells in three-dimensional culture and in vivo by integrin blocking antibodies. *J Cell Biol* 137(1):231-246 (cover feature).
- Lochter A and **Bissell MJ**. (1997) Mammary gland biology and the wisdom of extracellular matrix. In: Wilde CJ et al., eds. *Biological Signalling and the Mammary Gland*, pp. 77-92.
- **Bissell MJ**. (1998) Glandular structure and gene expression. Lessons from the mammary gland. In: Kukuruzinska MA & Tabak LA, eds. *Salivary Gland Biogenesis and Function. New York: Academic Science* 842:1-6.
- Boudreau N and **Bissell MJ**. (1998) Extracellular matrix signaling: integration of form and function in normal and malignant cells. *Curr Opin Cell Biol* 10(5):640-646.
- Hagios C, Lochter A and **Bissell MJ**. (1998) Tissue architecture: the ultimate regulator of epithelial function? *Phil Trans R Soc London B* 353(1370):857-870.
- Desprez PY, Lin CQ, Thomasset N, Simpson CJ, **Bissell MJ** and Campisi J. (1998) A novel pathway for mammary epithelial cell invasion induced by the helix-loop-helix protein Id-1. *Mol Cell Biol* 18(8):4577-4588.
- Hirai Y, Lochter A, Galosy S, Koshida S, Niwa S, and **Bissell MJ**. (1998) Epimorphin, functions as a key morphoregulator for mammary epithelial cells. *J Cell Biol* 140(1):159-169.

- Lelièvre SA, Weaver VM, Nickerson JA, Larabell CA, Bhaumik A, Petersen OW and **Bissell MJ**. (1998) Tissue phenotype depends on reciprocal interactions between the extracellular matrix and the structural organization of the nucleus. *Proc Natl Acad Sci USA* 95(25):14711-14716.
- Lelièvre SA and **Bissell MJ**. (1998) Communication between the cell membrane and the nucleus: role of protein compartmentalization. *J Cell Biochem (Suppl)* 30/31:250-263.
- Lochter A, Sternlicht MD, Werb Z and **Bissell MJ**. (1998) The significance of matrix metalloproteinases during early stages of tumor progression. *Ann N Y Acad Sci* 857:180-193.
- **Myers CA, Schmidhauser C, Mellentin-Michelotti J, Fragoso G, Roskelley CD, Casperson G, Mossi R, Pujuguet P, Hager G and **Bissell MJ**. (1998) Characterization of BCE-1, a transcriptional enhancer regulated by prolactin and extracellular matrix and modulated by the state of histone acetylation. *Mol Cell Biol* 18(4):2184-2195.
- Petersen OW, Rønnov-Jessen L, Weaver VM and **Bissell MJ**. (1998) Differentiation and cancer in the mammary gland: shedding light on an old dichotomy. *Adv Cancer Res* 75:135-161.
- Schmeichel KL, Weaver VM and **Bissell MJ**. (1998) Structural cues from the tissue microenvironment are essential determinants of the human mammary epithelial cell phenotype. *J Mammary Gland Biol Neo* 3(2):201-213.
- Srebrow A, Friedmann Y, Ravanpay A, Daniel CW and **Bissell MJ**. (1998) Expression of Hoxa-1 and Hoxb-7 is regulated by extracellular matrix-dependent signals in mammary epithelial cells. *J Cell Biochem* 69(4):377-391.
- Thomasset N, Lochter A, Sympon CJ, Lund LR, Williams DR, Behrendtsen O, Werb Z and **Bissell MJ**. (1998) Expression of autoactivated stromelysin-1 in mammary glands of transgenic mice leads to a reactive stroma during early development. *Am J Pathol* 153(2):457-467.
- *Wang F, Weaver VM, Petersen OW, Larabell CA, Dedhar S, Briand P, Lupu R and **Bissell MJ**. (1998) Reciprocal interactions between β 1-integrin and epidermal growth factor receptor in three-dimensional basement membrane breast cultures: a different perspective in epithelial biology. *Proc Natl Acad Sci USA* 95,14821-14826.
- Barash I, Faerman A, Richenstein M, Kari R, Damary GM, Shani M and **Bissell MJ**. (1999) In vivo and in vitro expression of human serum albumin genomic sequences in mammary epithelial cells with β -lactoglobulin and whey acidic protein promoters. *Mol Reprod Develop* 52:241-252.
- **Bissell MJ**. (1999) Tumor plasticity allows vasculogenic mimicry, a novel form of angiogenic switch: A rose by any other name? *Am J Pathol* 155 (3):675-9.
- **Bissell MJ** and Nelson JW, Editors. (1999) Cell-to-cell contact and extracellular matrix integration of form and function: The central role of adhesion molecules. *Curr Opin Cell Biol* 11:537-539.
- **Bissell MJ**, Weaver VM, Lelièvre SA, Wang F, Petersen OW and Schmeichel KL. (1999) Tissue structure, nuclear organization and gene expression in normal and malignant breast. *Cancer Res* 59:1757s-1764s.
- Lochter A, Navre M, Werb Z and **Bissell MJ**. (1999) α 1 and α 2 integrins mediate invasive activity of mouse mammary carcinoma cells through regulation of stromelysin-1 expression. *Mol Biol Cell* 10(2):271-282.

- Lochter A and **Bissell MJ**. (1999) An odyssey from breast to bone: multi-step control of mammary metastases and osteolysis by matrix metalloproteinases. *Acta Pathologica, Microbiologica et Immunologica Scandinavica* 107(1):128-36.
- Lochter A, Werb Z and **Bissell MJ**. (1999) Transcriptional regulation of stromelysin-1 gene expression is altered during progression of mouse mammary epithelial cells from functionally normal to malignant. *Matrix Biol* 18(5):455-67.
- Muschler J, Lochter A, Roskelley CD, Yurchenco P and **Bissell MJ**. (1999) Division of labor among the $\alpha 6 \beta 4$ integrins, $\beta 1$ integrins, and an E3 laminin receptor to signal morphogenesis and b-casein expression in mammary epithelial cells. *Mol Biol Cell* 10(9):2817-28.
- Péchoux C, Gudjonsson T, Rønnov-Jessen L, **Bissell MJ** and Petersen OW. (1999) Human mammary luminal epithelial cells contain progenitors to myoepithelial cells. *Develop Biol* 206(1):88-99.
- Spancake KM, Anderson CB, Weaver VM, Matsunami N, **Bissell MJ** and White RL. (1999) E7-transduced human breast epithelial cells show partial differentiation in three-dimensional culture. *Cancer Res* 59(24):6042-5.
- **Sternlicht MD, Lochter A, Sympton CJ, Huey B, Rougier JP, Gray JW, Pinkel D, **Bissell MJ** and Werb Z. (1999) The stromal proteinase MMP3/stromelysin-1 promotes mammary carcinogenesis. *Cell* 98(2):137-46.
- Weaver VM and **Bissell MJ**. (1999) Functional culture models to study mechanisms governing apoptosis in normal and malignant mammary epithelial cells. *J Mamm Gland Biol Neo* 4(2):193-201.
- Hansen R and **Bissell MJ**. (2000) Tissue architecture and breast cancer: the role of extracellular matrix and steroid hormones. *Endocrine-Related Cancer* 7(2):95-113.
- Lelièvre SA, **Bissell MJ** and Pujuguet P. (2000) Cell nucleus in context. Critical Reviews in *Eukaryotic Gene Expression* 10(1):13-20.
- Pujuguet P, Simian M, Liaw J, Timpl R, Werb Z and **Bissell MJ**. (2000) Nidogen-1 regulates laminin-1-dependent mammary-specific gene expression. *J Cell Sci* 113(Pt 5):849-858) (cover feature).
- Sternlicht MD, **Bissell MJ** and Werb Z. (2000) The matrix metalloproteinase stromelysin-1 acts as a natural mammary tumor promoter. *Oncogene* 19(8):1102-1113.
- Chen HM, Schmeichel KL, Mian IS, Lelièvre S, Petersen OW and **Bissell MJ**. (2000) AZU-1: a candidate breast tumor suppressor and biomarker for tumor progression. *Mol Biol Cell* 11(4):1357-1367.
- Park CC, **Bissell MJ** and Barcellos-Hoff MH. (2000) The influence of the microenvironment on the malignant phenotype. *Mol Med Today* Aug;6(8):324-329.
- Radisky D, Hagios C and **Bissell MJ**. (2001) Tumors are unique organs defined by abnormal signaling and context. *Seminars in Cancer Biology* 11(2):87-95.
- Hirai Y, Radisky D, Boudreau R, Simian M, Stevens ME, Oka Y, Takebe K, Niwa S and **Bissell MJ**. (2001) Epimorphin mediates mammary luminal morphogenesis through control of C/EBP β . *J Cell Biol* 153(4):785-794.
- Simian M, Hirai Y, Navre M, Werb Z, Lochter A and **Bissell MJ**. (2001) The interplay of matrix metalloproteinases, morphogens and growth factors is necessary for branching of mammary epithelial cells. *Development* 128(16):3117-3131.

- Muthuswamy SK, Li D, Lelièvre SA, **Bissell MJ** and Brugge JS. (2001) ErbB2, but not ErbB1, reinitiates proliferation and induces luminal repopulation in epithelial acini. *Nature Cell Biol* 3(9):785-793.
- **Bissell MJ** and Radisky D (2001) Putting tumours in context. *Nature Reviews(Cancer)* 1(1):46-54.
- Petersen OW, Nielsen HL, Gudjonsson T, Villadsen R, Rønnov-Jessen L and **Bissell MJ**. (2001) The plasticity of human breast carcinoma cells is more than epithelial to mesenchymal conversion. *Breast Cancer Res* 3(4):213-217.
- Pujuguet P, Radisky D, Levy D, Lacza C and **Bissell MJ**. (2001) Trichostatin A inhibits b-casein expression in mammary epithelial cells. *J Cellular Biochem*83(4):660-670.
- Zantek ND, Walker-Daniels J, Stewart J, Hansen RK, Robinson D, Miao H, Wang B, Kung HJ, **Bissell MJ** and Kinch MS. (2001) MCF-10A-NeoST: A new cell system for studying cell-ECM and cell-cell interactions in breast cancer. *Clin Can Res* 7:3640-3648.
- Radisky D, Muschler J and **Bissell MJ**. (2002) Order and disorder: the role of extracellular matrix in epithelial cancer. *Cancer Investigation* 20(1):139-153.
- Gudjonsson T, Rønnov-Jessen L, Villadsen R, Rank F, **Bissell MJ** and Petersen OW. (2002) Normal and tumor-derived myoepithelial cells differ in their ability to interact with luminal breast epithelial cells for polarity and basement membrane deposition. *J Cell Science* 115(1):39-50.
- **Bissell MJ**, Le Beyec J, and Anderson RL. (2002) Prostate cancer in bone: importance of context for inhibition of matrix metalloproteinases. *J Nat'l Cancer Inst* 94(1):4-5.
- Boudreau N and **Bissell MJ**. (2002) Extracellular matrix: The networking solution. In: Alison MA, ed. *The Molecular Basis of Cell and Tissue Organisation. The Cancer Handbook*. London, New York and Tokyo: *Nature Publishing Group*. Vol 1 of 2, Chapt 15, pp 209-224.
- *Gudjonsson T, Villadsen R, Nielsen HL, Rønnov-Jensen L, **Bissell MJ**, and Petersen OW. (2002) Isolation, immortalization, and characterization of a human breast epithelial cell line with stem cell properties. *Genes & Development*16(6):693-706.
- Roskelley CD and **Bissell MJ**. (2002) The dominance of the microenvironment in breast and ovarian cancer. *Seminars in Cancer Biology* 12(2):97-104.
- Wang F, Hansen RK, Radisky D, Yoneda T, Barcellos-Hoff MH, Petersen OW, Turley EA and **Bissell MJ**. (2002) Phenotypic reversion or death of cancer cells by altering signaling pathways in three-dimensional contexts. *J Nat'l Cancer Inst*94(19):1494-1503.
- **Weaver VM, Lelièvre S, Lakins JN, Chrenek MA, Jones JC, Giancotti F, Werb Z and **Bissell MJ**. (2002) b4 integrin-dependent formation of polarized three-dimensional architecture confers resistance to apoptosis in normal and malignant mammary epithelium. *Cancer Cell*2(3):205-216. Also see *Nature (News & Views)*419:790-791 and *MiniReview (Cell)* 111:923-925 (2002).
- Muschler J, Levy D, Boudreau R, Henry M, Campbell K and **Bissell MJ**. (2002) A role for dystroglycan in epithelial polarization: loss of function in breast tumor cells. *Cancer Research* 62(23):7102-7109.
- **Bissell MJ**, Radisky DC, Rizki A, Weaver, VM and Petersen, OW. (2002) The organizing principle: microenvironmental influences in the normal and malignant breast. *Differentiation* 70(9-10):537-46.

- Petersen OW, Nielsen HL, Gudjonsson T, Villadsen R, Rank F, Niebuhr E, **Bissell MJ** and Rønnov-Jessen L. (2003) Epithelial to mesenchymal transition in human breast cancer can provide a nonmalignant stroma. *Am J Pathol* 162:2:391-402.
- **Bissell MJ**, Mian IS, Radisky D and Turley E. (2003) Tissue-specificity: Structural cues allow diverse phenotypes from a constant genotype. In: *Origination of Organismal Form: Beyond the Gene in Developmental and Evolutionary Biology*, Müller GB and Newman SA (Eds.). The Vienna Series in Theoretical Biology. *MIT Press* 7:103-117.
- **Bissell MJ** and Bilder D. (2003) COMMENTARY: Polarity determination in breast tissue: desmosomal adhesion, myoepithelial cells, and laminin 1. *Breast Cancer Res.* 5:2:117-119.
- Anders M, Hansen R, Ding RX, Rauen K, **Bissell MJ**, and Korn WM. (2003) Disruption of 3D tissue integrity facilitates adenovirus infection by deregulating the coxsackievirus and adenovirus receptor. *Proc Natl Acad Sci* 100:4:1943-1948.
- Bhattacharyya C, Grate LR, Rizki A, Radisky D, Molina FJ, Jordan MI, **Bissell MJ**, Mian IS (2003.) Simultaneous relevant feature identification and classification in high-dimensional spaces: Application to molecular profiling data. *Signal Processing* 83:4:729-743.
- Schmeichel, KL and **Bissell MJ**. (2003) Modeling tissue-specific signaling and organ function in three dimensions. *J Cell Sci.* 116:2377-2388.
- Novaro V, Roskelley C and **Bissell MJ**. (2003) Collagen-IV and laminin-1 regulate estrogen receptor alpha expression and function in mouse mammary epithelial cells. *J Cell Science* 116(14) 2975-2986.
- Gudjonsson T, Rønnov-Jessen L, Villadsen R, **Bissell MJ** and Petersen OW. (2003) To create the correct microenvironment: three-dimensional heterotypic collagen assays for human breast epithelial morphogenesis and neoplasia. *Methods* Jul;30(3):247-55.
- Radisky DC, Hirai Y and **Bissell MJ**. (2003) Delivering the message: epimorphin and mammary epithelial morphogenesis. *Trends Cell Biol* 13(8):426-34.
- *Park, CC, Henshall-Powell, RL, Erickson, AC, Talhouk, R, Parvin, B, **Bissell MJ** and Barcellos-Hoff MH. (2003) Ionizing radiation induces heritable disruption of epithelial cell interactions. *Proc Natl Acad Sci* 100:19:10728-10733.
- Wiseman BS, Sternlicht MD, Lund LR, Alexander CM, Mott J, **Bissell MJ**, Soloway P, Itohara S and Werb Z. (2003) Site-specific inductive and inhibitory activities of MMP-2 and MMP-3 orchestrate mammary gland branching morphogenesis. *Journal of Cell Biology* 162 (6):1123-1133.
- Fata JE, Werb, Z and **Bissell MJ**. (2003) Regulation of mammary gland branching morphogenesis by the extracellular matrix and its remodeling enzymes. *Breast Cancer Res Review* 6:1-11.
- [Petersen OW](#), [Gudjonsson T](#), [Villadsen R](#), [Bissell MJ](#), [Rønnov-Jessen L](#). (2003) Epithelial progenitor cell lines as models of normal breast morphogenesis and neoplasia. *Cell Prolif.* 36 Suppl 1:33-44. Review.
- [Park C](#), [Zhang H](#), [Peng M](#), [Bissell MJ](#). (2003) Cell-ECM mediated radiation response in breast cancer: beta1 integrin as a potential molecular target. *Int J Radiat Oncol Biol Phy* 57(2 Suppl):S161.
- Itoh M and Bissell MJ (2003). The Organization of Tight Junctions in Epithelia: Implications for Mammary Gland Biology and Breast Tumorigenesis. *J Mammary Gland Biol Neoplasia* (4):449-462.

- Kenny PA and Bissell MJ. (2003) Tumor reversion: Correction of malignant behavior by microenvironmental cues. *Int J Cancer Review* 107(5):588-695.
- Bissell MJ, Rizki A and Mian IS (2003) Tissue architecture: the ultimate regulator of breast epithelial function. *Curr Opin Cell Biol* (6):753-62.
- Come SE, Buzdar AU, Arteaga CL, Bissell MJ, Brown MA, Ellis MJ, Goss PE, Green JE, Ingle JN, Lee AV, Medina D, Nicholson RI, Santen RJ, Schiff R, Hart CS (2004.) Proceedings of the third international conference on recent advances and future directions in endocrine manipulation of breast cancer: conference summary statement. *Clin Cancer Re.* 2004 10(1 Pt 2):327S-30S.
- Novaro V, Radisky DC, Ramos Castro NE, Weisz A, Bissell MJ. (2004) Malignant mammary cells acquire independence from extracellular context for regulation of estrogen receptor alpha. *Clin Cancer Res* 10(1 Pt 2):402S-9S.
- *Liu H, Radisky DC, Wang F and Bissell MJ. (2004) Polarity and proliferation are controlled by distinct signaling pathways downstream of PI3-kinase in breast epithelial tumor cells. *J Cell Biol* 164(4):603-12.
- Radisky DC and Bissell MJ (2004). Respect Thy Neighbor! *Science* (Perspective) 303:775-777.
- Blaustein M, Pelisch F, Coso OA, Bissell MJ, Kornblihtt AR, Srebrow, A. (2004) Mammary epithelial-mesenchymal interaction regulates fibronectin alternative splicing via phosphatidylinositol 3-kinase. *J Biol Chem* 279(20):21029-37.
- Rizki A and Bissell MJ (2004). Extracellular Matrix: Tissue Specific Regulator of Cell Proliferation. In *Cell Cycle & Growth Control: Biomolecular Regulation and Cancer*, Stein GS and Pardee AB (Eds.). John Wiley & Sons, Inc., NJ. 9:297-332.
- Rizki A and Bissell MJ. (2004) Homeostasis in the breast: it takes a village. *Cancer Cell* 6(1):1-2.
- Singh J, Itahana Y, Knight-Krajewski S, Kanagawa M, Campbell KP, Bissell MJ and Muschler J. (2004) Proteolytic enzymes and altered glycosylation modulate dystroglycan function in carcinoma cells. *Cancer Research* 64(17):6152-9.
- Alcaraz J, Nelson CM, Bissell MJ (2004). Biomechanical approaches for studying integration of tissue structure and function in mammary epithelia. *J Mammary Gland Biol Neoplasia*. 2004 Oct;9(4):361-74.
- Turley E and Bissell MJ (2004). Extracellular Matrix Remodeling in Breast Branching Morphogenesis and Breast Cancer: The Double-Edged Sword. In *Branching Morphogenesis*, Davies J (Ed.). Landes/Eurekah 7:121-137.
- Bissell MJ and LaBarge MA (2005). Context, tissue plasticity, and cancer: Are tumor stem cells also regulated by the microenvironment? *Cancer Cell* (Focus) 7:17-23.
- Kaminker P, Plachot C, Kim SH, Chung P, Crippen D, Petersen OW, Bissell MJ, Campisi J and Lelievre SA (2005). Higher-order nuclear organization in growth arrest of human mammary epithelial cells: A novel role for telomere-associated protein TIN2. *Journal of Cell Science* 118(6): 1321-1330.
- Maniotis AJ, Valyi-Nagy K, Karavitis J, Moses J, Boddipali V, Wang Y, Nunez R, Setty S, Arbieva Z, Bissell MJ, Folberg R (2005). Chromatin Organization Measured by AluI Restriction Enzyme Changes with Malignancy and Is Regulated by the Extracellular Matrix and the Cytoskeleton. *Am J Pathol*. 2005 Apr;166(4):1187-203.

- Liu H, Radisky DC, **Bissell MJ** (2005). Proliferation and Polarity in Breast Cancer: Untying the Gordian Knot. *Cell Cycle*. 4:5, 646-649.
- **Radisky DC, Levy DD, Littlepage LE, Liu H, Nelson CM, Fata JE, Leake D, Godden EL, Albertson DG, Nieto MA, Werb Z and **Bissell MJ** (2005). Rac1b and reactive oxygen species mediate MMP-3-induced EMT and genomic instability. *Nature* 436(7047):123-7.
- Adriance MC, Inman JL, Petersen OW, **Bissell MJ** (2005). Myoepithelial Cells: Good fences make good neighbors. *Breast Cancer Research* 2005 7(5):190-7.
- Wu W, Xing EP, Myers C, Mian IS and **Bissell MJ** (2005). Evaluation of normalization Methods for cDNA Microarray Data by k-NN Classification. *BMC Bioinformatics* 6:191.
- Krakowski AR, Laboureau J, Mauviel A, **Bissell MJ**, Luo K. (2005) Cytoplasmic SnoN in normal tissues and non-malignant cells antagonizes TGF β signaling through sequestration of the Smad proteins. *PNAS* 102(35):12437-12442.
- Nelson CM and **Bissell MJ** (2005). Modeling dynamic reciprocity: Engineering three-dimensional culture models of breast architecture, function, and neoplastic transformation. *Semin Cancer Biol.* 15(5):342-52.
- Bascom JL, Fata JE, Hirai Y, Sternlicht MD and **Bissell MJ**. (2005) Epimorphin overexpression in the mouse mammary gland promotes alveolar hyperplasia and mammary adenocarcinoma. *Cancer Research* 65:8617-8621.
- Lelievre SA and **Bissell MJ**. (2005) Three Dimensional Cell Culture: The Importance of Microenvironment in Regulation of Function. In *Encyclopedia of Molecular Cell Biology and Molecular Medicine*, Vol. 14, R.A. Meyers, Editor.
- **Bissell MJ**, Kenny PA and Radisky D. (2005) Microenvironmental regulators of tissue structure and function also regulate tumor induction and progression: the role of extracellular matrix and its degrading enzymes. *Cold Spring Harbor Symposia on Quantitative Biology, Symposium 70*, Pages 343-356.
- Myers C, Liu H, Lee E, and **Bissell MJ** (2006) Three-Dimensional Cultures of Normal and Malignant Human Breast Epithelial Cells to Achieve *in vivo*-like Architecture and Function. In *Cell Biology: A Laboratory Handbook*, Third Edition, Julio Celis, Editor.
- *Park CC, Zhang H, Pallavicini M, Gray JW, Baehner F, Park CJ, **Bissell MJ**(2006). β 1 Integrin Inhibitory Antibody Induces Apoptosis of Breast Cancer Cells, Inhibits Growth, and Distinguishes Malignant from Normal Phenotype in Three Dimensional Cultures and In vivo. *Cancer Research* Feb 1;66(3):1526-35.
- Radisky DC, **Bissell MJ** (2006). Matrix metalloproteinase-induced genomic instability. *Curr Opin Genet Dev.* Feb;16(1):45-50.
- Liu H, Radisky DC, Nelson CM, Zhang H, Fata J and **Bissell MJ** (2006). Mechanism of Akt1 inhibition of breast cancer cell invasion reveals a protumorigenic role for TSC2. *Proc Natl Acad Sci U S A.* 2006 Mar 14;103(11):4134-9.
- Semeiks JR, Rizki A, **Bissell MJ** and Mian IS (2006). Ensemble attribute profile clustering: discovering and characterizing groups of genes with similar patterns of biological features. *BMC Bioinformatics* Mar 16;7(1):147
- Knowles DW, Sudar D, Bator-Kelly C, **Bissell MJ**, and Lelievre SA (2006). Automated local bright feature image analysis of nuclear protein distribution identifies changes in tissue phenotype. *Proc Natl Acad Sci U S A.* 2006 Mar 21;103(12):4445-50.

- Kenny PA, Nelson CM and **Bissell, MJ** (2006). The Ecology of Tumors. *The Scientist* 20, 30-35.
- Gudjonsson T, Adriance MC, Sternlicht MD, Petersen OW and **Bissell MJ**(2006). Myoepithelial cells: their origin and function in breast morphogenesis and neoplasia. *J Mammary Gland Biol Neoplasia*. 2005 Jul;10(3):261-72.
- Fournier MV, Martin KJ, Kenny PA, Xhaja K, Bosch I, Yaswen P and **Bissell, MJ** (2006). Gene expression signature in organized and growth-arrested mammary acini predicts good outcome in breast cancer. *Cancer Research*. 2006 Jul 15;66(14):7095-102.
- Nelson CM and **Bissell MJ** (2006). Of extracellular matrix, scaffolds, and signaling: Tissue architecture regulates development, homeostasis, and cancer. *Annual Review of Cell and Developmental Biology* – Review Article for Volume 22. Sep 27 [Epub ahead of print]
- Weir ML, Oppizzi ML, Henry MD, Onishi A, Campbell KP, **Bissell MJ** and Muschler JL (2006). Dystroglycan loss disrupts polarity and β -casein induction in mammary epithelial cells by perturbing laminin anchoring. *J Cell Sci*. Oct 1;119(Pt 19):4047-58. Epub 2006 Sep 12.
- **Nelson, CM, van Duijn M, Inman JL, Fletcher DA and **Bissell MJ**(2006). Tissue Geometry Determines Sites of Branching Morphogenesis in Organotypic Cultures. *Science* Oct 13;314(5797):298-300.
- Tölg C, Hamilton SR, Nakrieko KA, Walton P, McCarthy JB, **Bissell MJ**, Turley EA (2006). Rhamm-/- fibroblasts are defective in CD44-mediated ERK1,2 mitogenic signaling, leading to defective skin wound repair. *Journal of Cell Biology* Dec 18;175(6):1017-28. Epub 2006 Dec 11.
- Radisky DC, Kenny PA, **Bissell MJ** (2007). Fibrosis and Cancer: Do myofibroblasts come from epithelial cells via EMT? *Journal of Cellular Biochemistry*. 2007 Jan 8.
- Radisky DC, Kenny PA, **Bissell MJ** (2007). Fibrosis and Cancer: Do myofibroblasts come from epithelial EMT? *Journal of Cellular Biochemistry* 2007 Jan 8.
- **Bissell MJ**. Modelling molecular mechanisms of breast cancer and invasion: lessons from the normal gland. *Biochem Soc Trans*. 2007 Feb;35(Pt 1):18-22.
- ** Kenny PA and **Bissell MJ** (2007) Targeting TACE-dependent EGFR ligand shedding in breast cancer. *Journal Clinical Investigation* 117 (2) 337-345
- Beliveau A, Bassett E, Lo AT, Garbe J, Rubio MA, **Bissell MJ**, Campisi J, Yaswin P (2007.) p53-dependent Integration of Telomere and Growth Factor Deprivation Signals. *Proc Natl Acad Sci U S A*. 2007 Mar 13;104(11):4431-6.
- Xu, R, Spencer VA, **Bissell MJ** (2007) Extracellular Matrix-Regulated Gene Expression Requires Cooperation of SWI SWI/SNF and Transcription Factors. *Journal Biological Chemistry*. 2007 Mar 26.
- Hamilton SR, Fard SF, Paiwand FF, Tolg C, Veiseh M, Wang C, McCarthy JB, **Bissell MJ**, Koropatnick J, Turley EA (2007). The hyaluronan receptors CD44 and RHAMM (CD168) form complexes with ERK1,2, which sustain high basal motility in breast cancer cells. *Journal Biological Chemistry* 2007 Mar 28.
- Lee GY, Kenny PA, Lee EH, **Bissell MJ** (2007.) Three-dimensional culture models of normal and malignant breast epithelial cells. *Nature Methods*. Nat Methods. 2007 Apr;4(4):359-65.

- Radisky DC, **Bissell MJ** (2007) NF-kappaB links oestrogen receptor signalling and EMT. *Nature Cell Biology*. 2007 Apr;9(4):361-3.
- Villadsen R, Fridriksdottir AJ, Rønnov-Jessen L, Gudjonsson T, Rank F, Labarge MA, **Bissell MJ**, Petersen OW (2007). Evidence for a Stem Cell Hierarchy in the Adult Human Breast. *The Journal of Cell Biology*. 2007 Apr 9;177(1):87-101
- Fata JE, Mori H, Ewald AJ, Zhang H, Yao E, Werb Z, **Bissell MJ** (2007) The MAPKERK-1,2 pathway integrates distinct and antagonistic signals from TGFβ and FGF7 in morphogenesis of mouse mammary epithelium. *Developmental Biology* 2007 Mar 16
- Sandal T, Valyinagy K, Spencer VA, Folberg, R, **Bissell MJ**, Maniotis AJ (2007) Epigenetic Reversion of Breast Carcinoma Phenotype Is Accompanied by Changes in DNA Sequestration as Measured by AluI Restriction Enzyme. *Am J Pathol*. 2007 May;170(5):1739-49.
- Kenny PA, Lee GY, **Bissell MJ** (2007.) Targeting the Tumor microenvironment. *Frontiers in Bioscience* 2007 May 1;12:3468-74.
- Kenny PA, Lee GY, Myers CA, Neve RM, Semeiks JR, Spellman PT, Lorenz K, Lee EH, Barcellos-Hoff MH, Petersen OW, Gray JW, **Bissell MJ** (2007) The morphologies of breast cancer cell lines in three-dimensional assays correlate with their profiles of gene expression. *Molecular Oncology* 1(1): 84-96
- Labarge MA, Petersen OW, **Bissell MJ** (2007.) Culturing Mammary Stem Cells. *John Wiley & Sons, Hoboken* (IN PRESS)
- Radisky DC, Stallings-Mann, M1, Hirai Y, **Bissell MJ** (2007.) Dual Topology, Multiple Functions: Working Both Sides of the Fence. *Nature Reviews Molecular Cell Biology* (IN PRESS)
- Itoh M, Nelson CM, Myers CA, **Bissell MJ** (2007). Rap1 integrates tissue polarity, lumen formation, and tumorigenic potential in human breast epithelial cells. *Cancer Research*. (IN PRESS)
- LeBeyec J, Xu R, Lee SY, Nelson CM, Rizki A, Alcaraz J, **Bissell MJ** (2007.) Cell shape regulates global histone acetylation in human mammary epithelial cells. *Experimental Cell Research*. (IN PRESS)