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**EDUCATION AND TRAINING:**

Bryn Mawr College, Bryn Mawr, PA	1961	Chemistry, transferred
Radcliffe/Harvard College, Cambridge, MA	B.A. 1963	Chemistry (Honors)
Harvard University, Cambridge, MA	M.A. 1965	Bacteriology and Biochemistry
Harvard University, Cambridge, MA	Ph.D. 1969	Microbiology and Molecular Genetics

**POSITIONS:**

1969-1970	Milton Fellow, Harvard University
1970-1972	American Cancer Society Fellow, Department of Molecular Biology, UCB,
1972-1976	Staff Biochemist, Lawrence Berkeley National Laboratory (LBNL)
1976-Present	Senior Staff, LBNL
1979-Present	Faculty, Graduate Group in Comparative Biochemistry, UCB
1986-1988	Visiting Wellcome Professor, Kettering Institute, University of Cincinnati Medical School
1988-1992	Director, Cell & Molecular Biology Division, LBNL
1992-2002	Director, Life Sciences Division (included Cell & Molecular Biology Division), LBNL
1995-2002	Associate Director for all Biosciences, LBNL
2001-Present	Faculty, Graduate Group in Endocrinology, UCB
2002-Present	Faculty, Graduate Group in Molecular Toxicology, UCB
2002-Present	Distinguished Senior Scientist, LBNL
2002-Present	Senior Advisor to the Laboratory Director on Biology, LBNL
2008-Present	Faculty, Graduate Group in Bioengineering, UCB/UCSF
2009-Present	Advisor to the Life Sciences Division Director, LBNL
2010-Present	Mentor, Biology Scholars Program (IMSD), UCB

**HONORS AND AWARDS** (selected; Please note: Named Lectures are not detailed here: The Named Lectures are more than 60; Keynotes and Distinguished Lectures are more than 80) :

2015:	Honorary Medal (STS/ CCSS) (Signal Transduction Society and Cell Communication and Signaling' Society)
2015	Ernest W. Bertner Award, MD Anderson Cancer Center
2014	California State Assembly STEM Women of the Year Award
2013	Inaugural Class of Fellows of the AACR Academy
2012	AACR Distinguished Lectureship in Breast Cancer Research
2012	Lifetime Achievement Prize, Inaugural Recipient, Lawrence Berkeley National Laboratory
2011	Breast Cancer Research Foundation's Jill Rose Award for distinguished biomedical research.
2011	Susan Bulkeley Butler Leadership Excellence Award, Purdue University
2010	Elected Fellow, Royal Society of Chemistry
2010	Elected Fellow, National Academy of Sciences
2010	The Alexander Bodini Foundation Prize for Scientific Excellence in Medicine, American-Italian Cancer Foundation.
2009	Rothschild-Yvette Mayent-Institut Curie Award, Institut Curie
2009	MERIT Award, US, NIH
2008	Mina J. Bissell Award, University of Porto, Portugal (established in honor of MJB and to be given every two-4 years to a person who has changed a field)
2008	FASEB - Excellence in Science Award
2008	Second Innovator Award: US, DOD
2008	American Cancer Society's Medal of Honor
2007	Ted Couch Award and Lectureship in Cancer Research, H. Lee Moffitt Cancer

- 2007 Pezcoller Foundation–AACR International Award for Cancer Research  
 2007 Inserm International Foreign Scientist of the Year Award, France  
 2007 Elected Fellow, American Philosophical Society  
 2005 First Distinguished Scientist Fellowship Award in Medical Sciences, OBER, U.S. Dept. of Energy  
 2004 First Discovery Health Channel Medical Honor Medal  
 2004 Honorary Doctorate, University of Copenhagen  
 2003 Susan G. Komen Foundation Brinker Award  
 2002 First Innovator Award in Breast Cancer, U.S. Department of Defense  
 2002 Elected Fellow, American Academy of Arts and Sciences  
 2001 Honoris Docteur Causa, Pierre et Marie Curie University, Paris, France  
 2000–2002 President, International Society of Differentiation  
 1999 Clowes /Eli Lilly Award of the American Association for Cancer Research  
 1998 Mellon Award, University of Pittsburgh  
 1997 President, American Society of Cell Biology  
 1997 Exceptional Service Award, OBER, U.S. Dept. of Energy  
 1997 Elected Fellow, Institute of Medicine of the National Academies  
 1996 E.O. Lawrence Award, U.S. Dept. of Energy  
 1994 Elected Fellow, American Association for Advancement of Science  
 1993 ASCB Women in Cell Biology Career Recognition Senior Award  
 1992–1993 John Simon Guggenheim Fellow, Ecôle Normale Superieure, Paris  
 1987 Wellcome Visiting Professor in Cell Biology, University of Cincinnati Medical School  
 1985 First Joseph Sadusk Award for Breast Cancer Research  
 1983–1984 Fogarty Senior Fellow, International Clinical Research Fellows Program (ICRF), London  
 1982 Distinguished Visiting Professor, Queensland Institute Medical Research, Brisbane, Australia  
 1962 Medal of American Institute of Chemists for top Chemistry student at Radcliffe/Harvard College, Cambridge, MA  
 1958 Medal for top high school student in the country, Iran  
 1980–Present More than 130 named and distinguished lectures (e.g. Harvey, Nobel Forum Katzir-Katchalski, Bagrit etc).

#### **NATIONAL COMMITTEES AND REVIEW BOARDS :**

- 1981–1985 NIH Molecular Cytology Study Section  
 1987–1989 NIH Gerontology & Geriatrics Review Study Section  
 1989–1992 NIH Pathology B Study Section  
 1993–1998 Board of Directors, Gordon Conferences  
 1993, '96, '98-'05 Chair, 2 Gordon Research Conferences and 2 Keystone Conferences  
 1995–1999 Member, Secretary of Energy's Advisory Committee, BERAC  
 1995 Chair, BERAC Subcommittee on Application of Genome and Structural Biology  
 1995–1998 Integration Panel, U.S. Army Breast Cancer Research Program  
 1996–1997 Chair, NASA Committee on the Role of Animal Research in Space  
 1997–1998 NCI Panel on “Preclinical Models of Cancer”  
 1997/1999 Howard Hughes Medical Institute. Evaluation Panels,, Washington, D.C.  
 1997–1998 Member, Rhoads Memorial Award Committee  
 1998–2002 Advisory Committee, Burroughs Wellcome Career Awards  
 1997 Scientific Advisory Board, University of Chicago Cancer Research Center  
 1999–2001 Board of Directors, AACR  
 1999–2005 Human Rights Committee of National Academies  
 2000–2009 Mentor, Institute of Defense Analysis, DSSG, Alexandria, VA  
 2001–2004 AACR Science Policy and Legislative Affairs Committees  
 2001–2004 Kansas–Biomedical Research Infrastructure Network  
 2002–2004 Scientific Advisory Board, MIT Center for Environmental Health Sciences  
 2003 Member, Kirk A. Landon–AACR Prize for Basic Cancer Research Committee  
 2003–2004 Scientific Advisory Board, Pacific Northwest National Laboratory  
 2004 NCI/NCAB Focus Group on Cancer in the Organism  
 2003–2006 Scientific Advisory Board, Susan Love Breast Cancer Research Foundation

2005–2007 Chair, Group on Cancer and Cancer Biology of the IOM of the National Academies  
 2005–2009 Member, Tumor Microenvironment Study Section, NIH  
 2006–2009 Member, Scientific Advisory Board, Biomega  
 2006–2008 Member, Nominating Committee, AACR  
 2006–2012 Member, Faculty 1000  
 2007–2008 Member, Selection Committee for the Pezcoller Foundation–AACR International Award for Cancer Research  
 2009 Member, Program Committee, AACR Annual Meeting

2009 Member, Search Committee, Director, LBNL  
 2009 Member, Search Committee, Deputy Director, LBNL  
 2009 Chair, TME Nominating Committee, AACR  
 2009–Present Member, Scientific Advisory Committee, Center for Research on Women's and Children's Health  
 2010–2013 Advisor, Institute of Defense Analysis, DSSG, Alexandria, VA  
 2010–2011 Member, committee for Cancer Post-GWAS Initiative, NIH/NCI  
 2010 Member, AACR Education Committee  
 2011–Present Scientific Advisory Board, Oregon Health and Sciences University  
 2013–Present Scientific Advisory Board, Arizona State University

#### **INTERNATIONAL COMMITTEES AND REVIEW BOARDS (Current Only)::**

1999–Present Advisory Committee, Instituto de Biologia Molecular e Celular (IBMC), Porto, Portugal  
 2002–Present Advisory Committee, Breakthrough Breast Cancer, London, UK  
 2007–Present Advisory Committee, Euro Consortium for Cancer Stem Cell Research, Italy, Sweden, Denmark, UK  
 2007–Present Advisory Committee, Italian National Cancer Institute, Rome, Italy  
 2009–Present Member, Scientific Advisory Board, American Portuguese Biomedical Research Fund, Oporto, Portugal  
 2009–Present Member, The International Scientific Committee, Cancer Research Centre, Lyon, France  
 2011–Present Advisory Committee, European Union's Innovative Medicines Initiative program, Paris, France  
 2011–Present Advisory Committee, Manchester Breakthrough Breast Cancer Unit, Manchester, England  
 2012–Present Advisory Board, World Premier International Research Center Initiative, Japan  
 2012–Present Advisory Board, VIB Center for the Biology of Disease, Belgium  
 2013–Present Advisory Board, Institute of Pharmacology & Structural Biology (IPBS), Toulouse, France  
 2013–Present Scientific Advisory Board, University of Bergen, Norway

#### **BIOTECHNOLOGY (Current Only):**

2010–Present BioArray Therapeutics Inc. Collegeville, PA  
 2010–Present Advisory Board, Mimvi, San Francisco, CA  
 2011–Present OncoSynergy, San Francisco, CA

#### **MEMBERSHIP IN PROFESSIONAL SOCIETIES (Current Only):**

1973–Present American Society for Cell Biology  
 1980–Present Society for In Vitro Biology  
 1983–Present Society for Developmental Biology  
 1988–Present American Association for Cancer Research  
 1988–Present International Society of Differentiation  
 1988–Present Sigma Xi, The Scientific Research Society  
 1993–Present American Society for Microbiology  
 1997–Present Institute of Medicine  
 2000–Present American Society for Matrix Biology (Co-founder)  
 2001–Present American Association for the Advancement of Science  
 2001–Present American Society for Biochemistry and Molecular Biology  
 2001–Present Association for Women in Science  
 2002–Present American Academy of Arts and Sciences  
 2004–Present Anticancer Therapeutics and Oncology Society  
 2004–Present EMT International Association  
 2007–Present American Philosophical Society (Co-founder)  
 2007–Present Rosalind Franklin Society (Charter Member)

2010–Present National Academy of Sciences  
 2010–Present Royal Society of Chemistry  
 2011–Present International Society for Stem Cell Research  
 2013–Present Radiation Research Society

**ASSOCIATE EDITOR & EDITORIAL BOARDS (Selected):**

1990–Present Journal of Cellular Biochemistry  
 1993–Present Molecular Carcinogenesis  
 1994–Present Cell Structure and Function  
 1995–Present Journal of Mammary Gland Biology and Neoplasia  
 1995–Present Journal of Experimental Therapeutics and Oncology  
 1997–Present Molecular Aspects of Medicine  
 1998–Present Journal of Clinical Investigation  
 1999–Present Breast Cancer Research (Senior Editor 2003–Present)  
 1999–Present International Journal of Cancer  
 2005–2011 Science Magazine  
 2006–Present Journal of Cell Science  
 2007–Present Molecular Oncology  
 2008–Present Integrative Biology (Editorial Board Chair 2008-2011; Advisory Board 2011-Present)  
 2010–Present BioArchitecture  
 2010–Present Cancer Microenvironment  
 2011–Present Frontiers in Molecular and Cellular Oncology  
 2011–Present Oncotarget  
 2011–Present Systems Biomedicine  
 2012–Present Biology Open  
 2012–Present PeerJ  
 2013–Present BioResearch Open Access  
 2013–Present Differentiation

**PATENTS:****Issued:** (9 )

United States Patent #6004805  
 United States Patent #6982151  
 United States Patent #5846536  
 United States Patent #6123941  
 United States Patent #8246952  
 United States Patent #6753154  
 United States Patent #6287790  
 United States Patent #7618627  
 United States Patent #7666850

**Pending:** (10)

**LECTURES (2011–Present only):** *Named, Keynote, and Distinguished are marked with an asterisk.*

**2011**

\* Bryn Mawr College, Bryn Mawr, PA (The Bernard Rothenberg Lecture in Biology and Public Policy)  
 \* Boston University, Boston, MA (Evans Center – Biochemistry Thematic Seminar)  
 \* American Association for Cancer Research, Orlando, FL (Plenary Lecture)  
 \* Karolinska Institute, Stockholm, Sweden (Nobel Forum).  
 Cold Spring Harbor Laboratory, New York, NY (Plenary Lecture)  
 \* IMPAKT 2011 Breast Cancer Conference, Brussels, Belgium (Plenary Lecture)  
 \* National Institutes of Health, Bethesda, MD ((NIH Distinguished Lecture Series)  
 \* University of California, Davis, CA (The Michael W. Chapman Lecture)  
 Japan Society for Cell Biology, Sapporo, Japan (Plenary Lecture)  
 \* Texas A&M Health Science Center, College Station, TX (Distinguished Lecturer)

- \* The Jackson Laboratory, Bar Harbor, ME (Distinguished Visitor)
- \* University of Windsor, Ontario, Canada (Robert J. Doyle Lecture)
- \* Karmanos Cancer Institute, Detroit, MI (Special Grand Rounds)
- \* European Association for Cancer Research-European Society for Medical Oncology Multidisciplinary Cancer Congress, Stockholm, Sweden (Plenary Lecture)
- \* International Symposium on Breast Cancer Prevention, Rennes, France (Keynote Speaker)
- \* Frontiers in Cancer Science, Singapore (Distinguished Speaker);
- \* International Symposium on Cancer Translational Research, Taiwan (Keynote Speaker)

**Other Lectures:** University of Chicago, Chicago, IL

Champalimaud Cancer Research Symposium, Lisbon, Portugal; University of California, San Francisco, CA; University of Illinois, Champaign-Urbana, IL; Oregon Health & Science University, Portland, OR; RIKEN Center for Developmental Biology, Kobe, Japan; Institute of Pharmacology and Structural Biology, Toulouse, France; Interdisciplinary Research Institute, Lille, France; The Breast Cancer Research Foundation, New York, NY; Columbia University, New York, NY.

**2012:**

- \* Sanford | Burnham Medical Research Institute, La Jolla, CA (President's Lecture)
- \* University of California, Irvine, CA (Distinguished Seminar)
- \* Harbor-UCLA Medical Center (Brasel Basic Science Conference)
- \* University of Arizona, Phoenix, AZ (Distinguished Seminar)
- \* Extracellular Matrix Symposium, Napa, CA (Keynote Address)
- \* Society of Investigative Dermatology, Raleigh, NC (Herman Beerman Award Lecture)
- \* University of Kentucky, Lexington, KY (Susan B. Lester Memorial Lecture)
- Nobel Symposium, Stockholm, Sweden (Plenary Lecture)
- \* Gordon Research Conference, Waterville, ME (Keynote Speaker)
- \* TED Global 2012, Edinburgh, Scotland (TED TALK)
- \* Personalized Cancer Care Symposium, Oslo, Norway (Key note speaker)
- \* International M. Judah Folkman Conference, Cambridge, MA (Keynote Speaker)
- Oncology at the Limits, London, UK (Plenary)
- \* University of Missouri, Columbia, MO (Franklin Lecture)
- \* City of Hope, Duarte, CA (Leading Edge Lectures)
- \* San Antonio Breast Cancer Symposium, San Antonio, TX (AACR Distinguished Breast Cancer Research Lectureship and Award)

**Other Lectures:**

NCI Think Tank Meeting, Bethesda, MD; Florida State University, Tallahassee, FL; University of California, San Francisco, CA ; Gilead Sciences, Inc. and Cold Spring Harbor Laboratory, Cold Spring Harbor, NY

**2013:**

- \* Weizmann Institute of Science, Rehovot, Israel (Aharon Katzir-Katchalski Lecture)
- \* MPI-Molecular Genetics, Berlin, Germany (Keynote Speaker)
- \* Cancer Research Center of Lyon International Symposium, Lyon, France (Keynote Speaker)
- \* 17th AEK Congress, Heidelberg, Germany (Keynote Lecture)
- \* American Association for Cancer Research (Session Chair and Plenary speaker)
- National Biotechnology Conference, San Diego, CA (Plenary Speaker)
- \* Centre for Cancer Biomarkers Symposium, Bergen, Norway ( Keynote Lecture)
- \* International Society for Stem Cell Research, Boston, MA (Keynote Speaker)
- \* NDPK/Nm23 Congress, Boston, MA (Keynote Speaker)
- \* Carnegie Mellon University Biomechanics Day, Pittsburgh, PA (Keynote Speaker)
- \* IBCN Conference, Saumur, France (Keynote Speaker)
- \*The University of Western Ontario, London, Ontario, Canada (Charles Gowdey Distinguished Lecture).

Other Lectures: Arizona State University; Indiana University, Indianapolis IN; Cleveland Clinic/Case Western Reserve University, Cleveland, OH; University of California Berkeley, Berkeley, CA; Cleary University, Howell, MI; University of Southern California, LA, CA.

**2014:**

- \*Nano-Engineering for Medicine and Biology/NEMB 2014, San Francisco, CA (Plenary Speaker)
- \*Lorne Cancer Conference, Lorne, Australia (Keynote)
- \*Brookhaven National Laboratory, Upton, NY (International Women's Day Lecture)
- \* Tumor Progression and Therapeutic Resistance/TPTR Conference, Boston, MA (Keynote Speaker)
- \* Annual McGowan Meeting, Pittsburg, MA (Keynote McGowan Lecture)
- \* Materials Research Society/MRS Symposium, San Francisco, CA (Keynote Speaker)
- \* Meeting of the Hinterzarten Circle on Cancer Research of the DFG, Cadenabbia, Italy (Expert Speaker)
- \* 13<sup>th</sup> Annual World Pharma Congress, Boston, MA (Keynote Speaker)
- Cell-to-Cell Communications in Cancer Symposium-Memorial Sloan Kettering, New York, NY (Plenary Speaker)
- \*Congress of the Brazilian Society for Cell Biology, Rio de Janeiro, Brazil (Keynote Speaker)
- \*International Behr Conference on Stem Cells and Cancer, Heidelberg, Germany (Keynote Speaker)
- Breast Cancer Research Foundation Annual Meeting, New York, NY (Plenary Speaker)
- Stanford Cancer Institute Symposium, Heterogeneity: Implications for Targeted Therapy, Stanford, CA (Plenary Speaker)
- Fritz Bender Foundation International Symposium, Bangkok, Thailand (Expert Speaker)
- \* Baylor College of Medicine, School of Medicine, Graduate Student Symposium, Houston TX (Keynote Speaker)
- International Symposium "Cancer Research and Clinical Care: The Next 100 Years", Rotterdam, The Netherlands (Plenary Speaker)
- \*European Association for Cancer Research Meeting on Microenvironment, Berlin, Germany (Keynote Speaker)
- \*Wistar Institute, Biomedical Center; Cancer Research and Vaccine Development, Philadelphia, PA (Keynote Speaker)
- \*Rosalind Franklin Society Annual Board Meeting, Washington, DC (Keynote Speaker)

Other Lectures: Arizona State University, University of New Mexico, New Mexico, University of Sao Paulo, Sao Paulo, Brazil, Children's Hospital Oakland Research Institute, Oakland, CA, Stanford University, Stanford, CA

**2015:**

- \*12th Symposium of C.R. Brubacher Foundation, "Breakthroughs in Cancer Research and Therapy", Zurich, Switzerland (Plenary Speaker)
- \*Susan Love's 8<sup>th</sup> Annual International Symposium on Breast, Santa Monica, CA (Keynote Speaker)
- \*Salk Institute for Biological Studies, San Diego, CA (Keynote - Inaugural Fellows' Speaker)
- \*Fermilab Lecture Series, Batavia, IL (Public Lecture)
- \*IPATIMUP University of Porto, "MJ Bissell Award and Symposium", Porto, Portugal, (Keynote Lecture)
- \*University of Notre Dame, South Bend, IN (3 Reilly Lectures, I,II,III)
- \*University of California Los Angeles (UCLA), Clinical and Translational Science Institute Series, Los Angeles, CA (Distinguished Lecture)
- \*Wound Healing Society Annual Meeting, San Antonio, TX (Keynote Lecture)
- \*Cold Spring Harbor Laboratory, "The Biology of Cancer Meeting", Cold Spring Harbor, NY (Keynote Lecture)
- \*Imperial College, London, UK (Bagrit Lecture),
- \*Karolinska Institute, "The Future of Tumor Biology Symposium", Stockholm, Sweden (Keynote Lecture)
- University of Tokyo, Okasaka Campus, Tokyo, Japan (Plenary Speaker)
- \*Gordon Research Conference on the "Science of Adhesive" Mount Holyoke, College, Mt. Hadley, MA (Keynote Lecture)
- Nanjing High Tech Zone, Scientific Seminar Collaboration, Nanjing, China (Expert Speaker)

Other Lectures: University of Chicago, Chicago; Broad Institute, USC, Los Angeles; Columbia University, New York, NY

**PEER REVIEWED:**

**I. PUBLICATIONS:** Please note: \*/\*\* denotes more/most important publications:

1. **Bissell MJ** (1969). Mechanism of excretion of an extracellular enzyme (Coccus P). Ph.D. Thesis, Harvard University.
2. Sarner NZ, **Bissell MJ**, Di Girolamo M 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.* 1971 Mar; 105(3):1090-8.

3. **\*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 Bacteriol.* 1971 Mar; 105(3):1099–109.
4. **Bissell MJ**, Rubin H and Hatié C (1971). Leakage as the source of overgrowth stimulating activity in Rous sarcoma transformed cultures. *Exp Cell Res.* 1971 Oct; 68(2):404–10.
5. **Bissell MJ**, Hatié C and Rubin H (1972). Patterns of glucose metabolism in normal and virus-transformed chick cells in tissue culture. *J Natl Cancer Inst.* 1972 Aug; 49(2):555–65.
6. **\*Bissell MJ**, White RC, Hatié C and Bassham JA (1973). Dynamics of metabolism of normal and virus-transformed chick cells in culture. *Proc Natl Acad Sci USA.* 1973 Oct; 70(10):2951–5.
7. **Bissell MJ**, Hatié C, Tischler AN 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.* 1974 Jun; 71(6):2520–4.
8. Dolberg D and **Bissell MJ** (1974). Side effects of amphotericin B–deoxycholate (fungizone) and nystatin in chick cells in culture. *In Vitro.* 1974 Jul–Aug; 10:26–9.
9. Bassham JA, **Bissell MJ** and White RC (1974). Quantitative tracer studies of metabolic dynamics of animal cells growing in tissue culture. *Anal Biochem.* 1974 Oct; 61(2):479–91.
10. Rambeck WA, **Bissell MJ** and Bassham JA (1975). Metabolism in normal and virus-transformed chick embryo fibroblasts as observed with glucose labeled with <sup>14</sup>C and tritium and with tritium–labeled water. *Hoppe Seylers Z Physiol Chem.* 1975 Feb; 356(2):203–12.
11. Dolberg DS, Bassham JA and **Bissell MJ** (1975). Selective inhibition of the facilitated mode of sugar uptake by cytochalasin B in cultured chick fibroblasts. *Exp Cell Res.* 1975 Nov; 96(1):129–37.
12. 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 Commun.* 1976 Feb 23; 68(4):1226–33.
13. **\*\*Bissell MJ**, Rambeck WA, White RC and Bassham JA (1976). Glycerol phosphate shuttle in virus-transformed cells in culture. *Science.* 1976 Feb 27; 191(4229):856–8.
14. Szabo C, **Bissell MJ** and Calvin M (1976). Inhibition of infectious Rous virus production by rifamycin derivative. *J Virol.* 1976 May; 18(2):445–53.
15. 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.* 1976 Aug 10; 251(15):4588–95.
16. 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.* 1976 Sep; 73(9):3173–7.
17. **\*Bissell MJ** (1976). Transport as a rate limiting step in glucose metabolism in virus-transformed cells: studies with cytochalasin B. *J Cell Physiol.* 1976 Dec; 89(4):701–9.
18. **\*Bissell MJ**, Farson D and Tung AS (1977). Cell shape and hexose transport in normal and virus-transformed cells in culture. *J Supramol Struct.* 1977; 6(1):1–12.
19. 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.* 1977 Apr; 106(1):175–83.
20. Warshawsky D, Kerns E, **Bissell MJ** and Calvin M (1977). Characterization of a photoproduct of 7,12–dimethylbenz[ $\alpha$ ]anthracene and its effects on chick–embryo cells in culture. *Biochem J.* 1977 Jun 15; 164(3):481–6.
21. **\*\*Teng MH**, Bartholomew JC and **Bissell MJ** (1977). Synergism between anti–microtubule agents and growth stimulants in enhancement of cell cycle traverse. *Nature.* 1977 Aug 25; 268(5622):739–41.
22. **\*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.* 1977 Oct; 74(10):4453–7.
23. 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. *Anal Biochem.* 1977 Dec; 83(2):580–8.
24. Chin S, **Bissell MJ** and Bassham JA (1977). The consequences of bisulfite exposure in primary chick embryo fibroblast in culture. *Bull Environ Contam Toxicol.* 1977 Dec; 18(6):749–57.
25. **Bissell MJ** (1978). Equality for women scientists. *Grants Magazine.* 1978; 1(4):331–4.
26. 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.* 1978; 35(2):76–82.
27. Bissell DM, Levine GA and **Bissell MJ** (1978). Glucose metabolism by adult hepatocytes in primary culture and by cell lines from rat liver. *Am J Physiol.* 1978 Mar; 234(3):C122–30.
28. **\*Szabo C** and **Bissell MJ** (1978). Antiviral action of a rifamycin derivative: formation of Rous sarcoma virus particles deficient in 60 to 70S RNA. *J Virol.* 1978 Mar; 25(3):944–7.
29. Levine GA, **Bissell MJ** and Bissell DM (1978). Conversion of glucose to sorbitol and fructose by liver–derived cells in culture. *J Biol Chem.* 1978 Sep 10; 253(17):5985–9.

30. 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.* 1978 Dec; 79(3):672–9.
31. **Bissell MJ**, Bartholomew JC, Folkman J, Smith H and Stampfer M (1979). Culture systems for studying malignancy. Meeting Report. *Cancer Res.* 1979 Oct; 39(10):4293–5 (with 19 other contributors).
32. **Bissell MJ**, Hatié C and Calvin M (1979). Is the product of the src gene a promoter? *Proc Natl Acad Sci USA.* 1979 Jan; 76(1):348–52.
33. Emerman JT and **Bissell MJ** (1979). A simple technique for detection and quantitation of lactose synthesis and secretion. *Anal Biochem.* 1979 Apr 15; 94(2):340–5.
34. Schwarz RI, Farson DA and **Bissell MJ** (1979). Requirements for maintaining the embryonic state of avian tendon cells in culture. *In Vitro.* 1979 Dec; 15(12):941–8.
35. 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.* 1979 Dec 10; 254(23):11763–6.
36. \***Bissell MJ**, Hatié 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.* 1980 May; 77(5):2711–5.
37. Emerman JT, Bartley JC and **Bissell MJ** (1980). Interrelationship of glycogen metabolism and lactose synthesis in mammary epithelial cells of mice. *Biochem J.* 1980 Nov 15; 192(2):695–702.
38. Vessal M, Choun MO, **Bissell MJ** and Bissell DM (1980). Fructose utilization and altered cytochrome P-450 in cultured hepatocytes from adult rats. *Biochim Biophys Acta.* 1980 Dec 1; 633(2):201–10.
39. \*\*Parry G, Bartholomew JC and **Bissell MJ** (1980). Role of src gene in growth regulation of Rous sarcoma virus-infected chicken embryo fibroblasts. *Nature.* 1980 Dec 25; 288(5792):720–2.
40. \***Bissell MJ** (1981). The differentiated state of normal and malignant cells or how to define a “normal” cell in culture. In: *International Review of Cytology.* 1981; 70:27–100. Academic Press.
41. Emerman JT, Bartley JC and **Bissell MJ** (1981). Glucose metabolite patterns as markers of functional differentiation in freshly isolated and cultured mouse mammary epithelial cells. *Exp Cell Res.* 1981 Jul; 134(1):241–50.
42. \*Schwarz RI, Mandell RB 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.* 1981 Sep; 1(9):843–53.
43. 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.* 1981 Oct; 78(10):6241–5.
44. Bartley JC, Emerman JT and **Bissell MJ** (1981). Metabolic cooperativity between epithelial cells and adipocytes of mice. *Am J Physiol.* 1981 Nov; 241(5):C204–8.
45. **Bissell MJ**, Nemethy EK, Riddle L and Calvin M (1981). Testing for tumor promoters in Euphorbia lathyris: analysis of possible health hazards. *Bull Environ Contam Toxicol.* 1981 Dec; 27(6):894–902.
46. 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. 233–8. Academic Press.
47. 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. 303–8. Academic Press.
48. \*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.* 1982 Aug; 79(15):4672–6.
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## PAST RECORD OF TRAINING

### Previous Postdoctoral Fellows and Graduate Students, and their highest ranked position after leaving the laboratory:

Deans: 2; Tenured Professors: 25; Assistant Professors:18; Senior Biotechnology Positions:18; Principal Investigators:12; Senior Scientists:5; Laboratory Managers:3; General Educators:2; Science Editor:1; Patent Attorneys:2! Hundreds of undergraduates many of whom are professors, practicing physicians or are in graduate and medical schools.