March, 2014

# CURRICULUM VITAE

Name: Gilbert Howlett Smith

Education:

| | |
|---|---|
| 1959 | B.A., Biology, Hartwick College, Oneonta, New York |
| 1963 | M.Sc., Biology, Brown University, Providence, Rhode Island |
| 1965 | Ph.D., Biology, Brown University, Providence, Rhode Island |

Brief Chronology of Employment:

| | |
|---|---|
| 1960–1961 | Research Assistant, Virus Studies Division, Sloan-Kettering Institute for Cancer Research, Rye, New York |
| 1961–1965 | NCI Predoctoral Training Fellowship, Biology Department, Graduate School for Medical Sciences, Brown University, Providence, Rhode Island |
| 1965–1967 | Staff Fellow in Research, Viral Biology Branch, National Cancer Institute, Bethesda, Maryland |
| 1967-1968 | Research Biologist, Staff, Viral Biology Branch, National Cancer Institute, Bethesda, Maryland |
| 1968–1970 | Head, Ultrastructural Research Section, Viral Biology Branch National Cancer Institute, Bethesda, Maryland |
| 1970-1976 | Senior Investigator, Laboratory of Biology, National Cancer Institute, Bethesda, Maryland |
| 1976-1986 | Senior Investigator, Molecular Genetics Section, Laboratory of Molecular Biology, National Cancer Institute, Bethesda, Maryland |
| 1986-2001 | Senior Investigator, Oncogenetics Section, Laboratory of Tumor Immunology and Biology, National Cancer Institute, Bethesda, Maryland |
| 2001-2002 | Senior Investigator, Chief, Section for Mammary Stem Cell Biology, Basic Research Laboratory, Center for Cancer Research, NCI, Bethesda, MD |
| 2002-2010 | Senior Investigator, Head, Section for Mammary Stem Cell Biology, Mammary Biology and Tumorigenesis Laboratory, Center for Cancer Research, NCI, Bethesda, MD |
| 2010 – Present | Senior Investigator, Head, Section for Mammary Stem Cell Biology, Cancer and Cell Biology Branch, Center for Cancer Research, NCI, Bethesda, MD |

Societies:

American Society for Cell Biology 1964-present
Sigma Xi (Brown University Chapter)
Tau Kappa Epsilon
American Society for Microbiology
American Association for Cancer Research
Councilman, Assembly of Scientists, NCI

Honors and Other Special Scientific Recognition:

| | |
|---|---|
| 1955-59 | Competitive Scholarship, Hartwick College |
| 1961-65 | U.S.P.H.S., N.C.I. Predoctoral Cancer Traineeship, Brown University |
| 1963 | Sigma Xi 1963 |
| 1981 | Guest Speaker, Gordon Research Conference on Cancer, "Viral/Chemical Cocarcinogenesis" |
| 1994 | Board of Directors, The Childhood Brain Tumor Foundation, Scientific Advisor |
| 1995 | Editor and Member, Biology of the Mammary Gland: World-wide Web Site - http://alice.dcrt.nih.gov/~mammary |
| 1995 | Editorial Board, Journal of Mammary Gland Biology and Neoplasia A Quarterly Review Journal |
| 1996 | Glenn Foundation Award for best research abstract contributing to understanding the mechanisms of Aging, American Society for Cell Biology |
| 2002 | Novel and Newsworthy Award, American Society for Cell Biology, top 10 research abstracts, "Identifying multi-lineage mammary epithelial progenitors, In Vivo" |
| 2003 | Mentor of Merit N.C.I. |
| 2003 | N.C.I. Mentor of Merit Award to acknowledge exemplary mentoring and guidance to trainees in Cancer Research |
| 2005 | NIH Merit Award for outstanding research into understanding the role of the mammary stem cell niche in development and tumorigenesis |
| 2005 | Novel and Newsworthy Award, American Society for Cell Biology, top 10 research abstracts, "The mammary stem cell niche modulates the repertoire of testicular stem cells" |
| 2005 | N.I.H. Award of Scientific Merit |
| 2006 | Keynote Speaker: 2006 Gordon Research Conference, Il Ciocco, Italy, "Mammary Stem Cells: Shibb of Mammary Development" |
| 2007 | Nominated for E.O. Wilson Award from ASCB by CCR/NCI |
| 2008 | Nominated for E.O. Wilson Award from ASCB by CCR/NCI |
| 2009 | Nominated for E.O. Wilson Award from ASCB by CCR/NCI |
| 2010 | Distinguished Alumnus Hartwick College |
| 2010 | Nominated for NCI Outstanding Mentor Award |
| 2010 | Clinical Professor in the Institute for Biomedical Sciences for Molecular Medicine, The George Washington University Medical College, Sept 2010 |
| 2011 | Commencement speaker at 2011 graduation and recipient of Honorary Doctorate of Science degree from Hartwick College, Oneonta, N.Y., May 28, 2011 |
| 2011 | Invited Discussant at the NBCC Summit on Primary Prevention of Breast Cancer, Aspen, CO, October1-3, 2011 |
| 2012 | Guest Editor "Biology of Mammary Gland Development Special Issue"; Seminars in Cell and Developmental Biology 2012 |
| 2013 | Nominated for E.O. Wilson Award from ASCB by CCR/NCI |

Invited Talks

1. Invited Speaker, Baylor College of Medicine, Department of Cell Biology, Seminar Series, "Understanding Cancer as a Developmental Anomaly", January, 1999

2. Invited Speaker, Vanderbilt University School of Medicine, Graduate Studies Seminar Series, “Evidence for Adult Epithelial Stem Cells in Breast”, March, 1999
3. Invited Speaker, University of Pennsylvania School of Medicine, Dept. of Pathology and Intern Med.-Cancer Research Seminar Series, ‘Our Current View of Adult Mammary Epithelial Stem Cells”, September, 1999
4. Invited Speaker, Natl. Action Plan on Breast Cancer Etiology,”Workshop on the Role of Tissue Architecture in Development of Breast Cancer”, Wash., DC, September, 1999
5. Keynote Speaker, Symposium on the “Comparative Pathology of Animal Models for Mammary Cancer”, “Mammary Epithelial Stem Cells in Mammary Development and Tumorigenesis”, Annapolis, MD, March, 1999
6. Invited Speaker, University of California, Lawrence Berkeley National Laboratory, Div. Life Sciences, 2000 Seminar series, February, 2000
7. Invited Speaker, University of Cincinnati School of Medicine, Dr. Nelson Horseman, Host- Spring Seminar Series in Tumor Biology, March 8, 2000
8. Invited Speaker, American Association for Cancer Research Annual Meeting, Invited as “Meet the Expert Sunrise Series Speaker” – subject-Mammary Epithelial Stem Cells, San Francisco, CA April, 2000
9. Invited Speaker, 1st Intl. Gordon Research Conf. on Mammary Gland Biology, Session on Stem Cells; Moderator of Mammary Development Session, Il Ciocco, Italy, May, 2000
10. Invited Speaker, Second Annual Mouse Biology Symposium Key Concepts in Breast Cancer, University of California, Davis, Center for Comparative Medicine; “Stem Cells in Breast Development and Cancer”, June, 2001
11. Moderator, Gordon Research Conference on Mammary Gland Biology, session on Genes and Development, June, 2001
12. Invited Speaker, University of Nebraska School of Medicine, Eppley Cancer research Institute, Graduate School Seminar Series, September, 2001
13. Speaker, MMHC Mini-Symposium “Somatic and Embryonic Stem Cell Research” Presentation, “Epithelial Stem Cells in the Mammary Gland”, Bethesda, MD, January, 2002
14. Invited Speaker, Paterson Symposium on Stem Cells, Paterson Institute for Cancer Research, Manchester, England, Mammary Epithelial Stem Cells, October, 2002
15. Invited Speaker, American Society for Cell Biology Annual meeting (Mini-symposium on Stem Cells) “Identifying Mammary Epithelial Multilineage Progenitors, In Vivo”, abstract selected in top ten “Novel and Newsworthy” by ASCB, San Francisco, December, 2002
16. Presenter and Discussant, National Cancer Institute Workshop on “Early Reproductive Events and Breast Cancer”, Bethesda, MD, February, 2002
17. Invited Speaker, AACR Special Conference “Advances in Breast Cancer Research: Genetics, Biology and Clinical Implications”, talk entitled “Functional Definition of Mammary Stem Cells”, October, 2003
18. Keynote Speaker, “Raisons for Hope” CBCRA International Conference on Breast Cancer, “Mammary Stem Cells: Biology and Clinical Implications”, Ottawa, Canada, October, 2003

19. Invited Presenter, Sex Steroids: an update on estrogen and progesterone actions: Role in cancer, ageing and reproductive medicine. “Early senescence of mammary stem cells protects against mammary tumorigenesis”, Montpellier, Frank, March, 2004
20. Invited Speaker, Mammary Stem Cell Workshop, Cancer Research, “Mammary Stem Cells: A historical Perspective”, London, UK, May, 2004
21. Invited Speaker, Gordon Research Conference - Mammary Gland Biology, “Long label retention and asymmetric division: Are they related in the mammary gland?”, Il Ciocco, Italy, June, 2004
22. Invited Speaker, Grand Rounds at Northwestern University School of Medicine by the Division of Endocrinology, “Stem Cell Biology and Breast Cancer” April, 2005
23. Plenary Speaker, “Asymmetric cell division in stem cells: A therapeutic obstacle?”, CCR Molecular Targets Annual Retreat, May, 2005
24. Plenary Speaker, CCR Combined Ann. Retreat for the Breast and Gynecological Malignancies & Cancer Prevention Faculties, “Evidence for a Mammary Stem Cell Niche”, July, 2005
25. Invited Speaker, CHI Stem Cell Research Conference, “ Label-retaining mammary epithelial cells divide asymmetrically and retain their original template DNA strands”, Cambridge, MA, August, 2005
26. Speaker, NIH Research Festival Symposium I, Cancer Stem Cells, Drug Resistance and Therapeutic Targets: “The Niche, Immortal DNA and Somatic Stem Cells” October, 2005
27. Invited Speaker and Discussant, Cancer Stem Cells, Banbury Center Conference,”The influence of the mammary stem cell niche on borrowed stem cells”, Cold Spring Harbor, NY, December, 2005
28. Mini-symposium Speaker, (Stem Cell Niches), Amer. Soc. for Cell Biology, “The mammary stem cell niche modulates the repertoire of testicular stem cells” selected as top ten abstract for “Novel and Newsworthy” research by the ASCB, December 2005
29. Invited Speaker and Discussant, AACR Workshop on Cancer Stem Cells, “Retrovirus Tagging of Stem Cells” Landsdowne, VA, February, 2006
30. Invited speaker, Advanced Course on: “Estrogens and Human Diseases” directed by B Agostara, HL Bradlow, L Massimo, and myself, Ettore Majorana Centre for Scientific Culture (http://www.ccsem.infn.it), Erice (TP, Sicily), May, 2006
31. Keynote Address, 2006 Gordon Conference on Mammary Gland Biology, “Mammary Stem Cells: Shiboleths of Mammary Development”, Il Ciocco, Italy, May-June 2, 2006
32. Invited Speaker, International Conference on "Drug and Gene-based Therapeutics", CAPSIS Hotel (Deluxe), Crete, Greece, September, 2006
33. Invited Lecturer, 2006 Short Course in Cancer Biology “Stem Cells in Cancer and Development” University of Nebraska Medical Center, Eppley Institute, May, 2006
34. Invited Plenary Speaker, 5th International Symposium on Hormonal Carcinogenesis, “What about stem cells marks them as credible candidates as tumorigenic targets” Montpellier, France, September, 2006
35. Symposium Speaker, NIH Research Festival, “Asymmetric Cell Division and Retention of Template DNA in Mammary Epithelium”, October 2006
36. Invited Speaker, Baylor College of Medicine Breast Cancer Group Seminar series, “Interaction between stem cells from alternative organs and the mammary stem cell microenvironment”, November, 2006

37. Invited Speaker, Cancer Prevention Workshop “Cancer Stem Cells as Targets for Cancer Prevention and Early Detection, “Asymmetric Division, Long Label-Retention and Cancer Susceptibility”, Natcher Conference Center, NIH, May, 2006
38. Invited Speaker, 9th Milan Breast Cancer Conf., “Reality or science fiction: targeting the stem cell: Session on Tumor Stem Cells: rethinking breast cancer”, June, 2007
39. Invited Keynote Speaker, Inaugural Breast Cancer Research Symposium, U.C. Davis Cancer Center, “Stem cells and the mammary microenvironment”, Sacramento, CA October, 2007
40. Invited Keynote Speaker, Prolactin and Growth Hormone Family, Gordon Research Conference, “Mammary Stem Cells”, Ventura Beach, CA, February, 2008
41. Invited Keynote Speaker, Karmanos Cancer Institute Scientific Retreat, “Stem Cells and Microenvironment”, Detroit, MI, March, 2008
42. Discussion Leader, Gordon Research Conference, “Control of Stem Cells”, Il Ciocco, Italy, June, 2008
43. Invited Speaker, Medical Seminar Series Northwestern University School of Medicine, “Mammary Stem Cells and the Environment”, September, 2008
44. Speaker, Annual National Institutes of Health Research Festival, “The Power of the Stem Cell Niche (or Nicht Power)”, October, 2008
45. Invited Speaker, Tufts School of Medicine Seminar Series, “Reprogramming Stem Cells in Vivo”, October, 2008
46. Invited Speaker, Lawrence Berkeley Laboratories Seminar Series, “Stem Cells and the Mammary Microenvironment” January 8-9, 2009
47. Plenary Speaker, Keystone Conference on Extrinsic Control of Tumor Genesis and Progression, “Stem Cells and their Niche”, Vancouver, BC, March, 2009
48. Invited Seminar Speaker (by the Graduate Students), University Of Colorado Health and Sciences Center, “Mammary Stem Cells”, Denver, CO, April, 2009
49. Invited Speaker, “Asymmetric Cell Division and The Immortal DNA Strand”, Clemson University, March, 2010
50. Seminar Series Speaker, Division of Cancer Biology, “Stem, Cancer Cells and the Mammary Microenvironment”, Executive Plaza, May, 2010
51. Invited Speaker, Curie Institute, "Reprogramming cells in the developing mammary gland", Paris France, May, 2010
52. Invited Speaker, Friedrich Meischer Institute for Scientific Research,"Reprogramming cells in the developing mammary gland”, Basel Switzerland, June, 2010
53. Invited Plenary Speaker, Gordon Research Conference Mammary Gland Biology, Reprogramming cells in the developing mammary gland" in Phenotypic Plasticity, Dr. Chris Ormandy, President GRC meeting, June, 2010
54. Invited Speaker, Cancer Stem Cell Consortium, “Mammary Stem Cells and the Mammary Microenvironment”, Dr. Snorri Thorgiessen, Inviter, December, 2010
55. Commencement Speaker, Hartwick College Graduation, Invited by Hartwick graduating students 2011 and President Margaret Drugovich. Received an Honorary Doctor of Science degree, Oneonta, NY, May, 2011.
56. Discussant (invited), NBCC Breast Cancer Prevention Summit by Fran Vesco, Aspen, CO, October, 2011
57. Plenum Speaker, 2014 Gordon Conference on Mammary Biology, Session on "The Mammary Gland Niche And Reprogramming", Il Ciocco, Italy, June, 2014

# BIBLIOGRAPHY

Published


1. Smith GH: Role of the milk agent in the disappearance of mammary cancer in C3H/StWi mice. J. Natl. Cancer Inst. 36: 635–701, 1966.
2. Smith GH: Cytochemical studies on the mouse mammary tumor virus. Cancer Res. 27: 2179–2196, 1967.
3. Dalton AJ, Rowe WP, Smith GH, Wilsnack RE, and Pugh WE: Morphological and cytochemical studies on Iymphocytic choriomeningitis virus. J. Virol. 2: 1465–1478, 1968.
4. Abelson HT, Smith GH, Hoffman HA, and Rowe WP: Use of enzyme-labeled antibody for electron microscope localization of Iymphocytic choriomeningitis virus. J. Natl. Cancer Inst. 42: 497-515, 1969.
5. Abelson HT and Smith GH: Nuclear pores: the pore-annulus relationship in thin section. J. Ultrastructure Res. 30: 558–588, 1970.
6. Smith GH, Andervont HB, and Dunn TB: Attempts to detect nodule-inducing virus (NIV) in strain Rlll mice. J. Natl. Cancer Inst. 44: 657–671, 1970.
7. Blair PB, Weiss DW, and Smith GH: Studies on antigenic cross reactivity of oncogenic RNA viruses. Isr. J. Med. Sci. 6: 611–616, 1970.
8. Vlahakis G, Heston WE, and Smith GH: Strain C3H-AVyfb mice: ninety percent incidence of mammary tumors transmitted by either parent. Science 170: 185–187, 1970.
9. Wivel NA and Smith GH: Distribution of intracisternal A particles in a variety of normal and neoplastic mouse tissues. Int. J. Cancer 7: 167–175, 1971.
10. Smith GH and Wivel NA: Isolation and partial characterization of intracytoplasmic A particles. Virology 48: 270–274, 1972.
11. Heston WE, Vlahakis G, and Smith GH: Mammary gland tumors in substrains C57Bl/M and C57BL/He mice. J. Natl. Cancer Inst. 49: 805–812, 1972.
12. Smith GH and Wivel NA: Intracytoplasmic A particles: mouse mammary tumor virus nucleoprotein cores. J. Virol. 11: 574–584, 1973.
13. Smith GH and Wivel NA: Isolation and partial characterization of intracytoplasmic A particles. Compte Rend. du 7e Colloque Int. sur les Tum. Mamm. Paris, Ministere de la Sante Publique, pp 157–159, 1972.
14. Gantt RR, Smith GH, and Julian BT: Base specific methylase activity in RNA tumor viruses: Avian Leukosis virion-associated RNA methylase(s). Virology 53: 534–586, 1973.
15. Smith GH, Litwack M, and Longfellow DG: High molecular weight DNA associated with intracytoplasmic A particle inclusions. Cancer Res. 34: 2654–2662, 1974.
16. Gantt R and Smith GH: RNA methylase activity in virus-infected normal and neoplastic mouse mammary tissues. In: The Biochemistry S-adenosylmethionine. E. Borek, F. Salvatore, F. Schlenk, H., Williams-Ashman, and V. Zappia, (Eds.) 1974. Columbia University Press, New York.
17. Noseworthy J, Smith GH, Himmelhoch SR, and Evans WH: Protein and glycoprotein electrophoretic patterns of enriched fractions of primary and secondary granules from guinea pigs polymorphonuclear leukocytes. J. Cell Biol. 65: 577–586, 1975.
18. Smith GH and Lee BK.: Mouse mammary tumor virus polypeptide precursors in intracytoplasmic A particles. J. Natl. Cancer Inst. 55: 493–496, 1975.

19. Gantt R, Smith GH, and Julian BT: Virion-associated and cellular RNA methylase activity in normal and neoplastic mammary tissue from mammary tumor virus-infected and uninfected mice. Cancer Res. 35: 1847–1853, 1975.
20. Smith GH, Longfellow DG, and Nixon JW: Autoradiographic evidence for the association of DNA with intracytoplasmic A particle inclusions in-situ. J. Natl. Cancer Inst. 55: 1413–1417, 1975.
21. Smith GH, Kidwell WR, and Schneider WC: Cytoplasmic DNA in rat corpora lutein cells: effect of prolactin on 3H-thymidine incorporation. Exp. Cell Res. 96: 321–334, 1975.
22. Wivel NA, Smith GH, and Ozer HL: Comparison of intracytoplasmic A particles and intracisternal A particles. Int. J. Cancer 16: 240–248, 1975.
23. Longfellow DG and Smith GH: Further characterization of intracytoplasmic A particle-associated DNA. J. Virol. 17: 816–823, 1976.
24. Schneider WC and Smith GH: On the isolation of zymogen granules from rat pancreas by zonal ultracentrifugation and their nuclei acid content. Anal. Biochem. 80: 373–382, 1977.
25. Michalides R, Nusse R, Smith GH, Zotter S, and Muller M: Relationship between nucleic acids associated with intracytoplasmic A particles and mouse mammary tumor virus RNA. J. Gen. Virol. 37: 511–521, 1977.
26. Cardiff RD, Puentes MJ, Young LJT, Smith GH, Teramoto YA, Astrock BW, and Pratt TS: Serological and biochemical characterization of the mouse mammary tumor virus with localization of P10. Virology 85: 157–167, 1978.
27. Evans WH, Mage MG, Hsu CK, Himmelhoch SR, and Smith GH: Transplantable granulocytic leukemia in strain 13 guinea pigs. Cancer Res. 39: 130–136, 1978.
28. Vonderhaar BK, Smith GH, Pauley RJ, Rosen JM, and Topper YJ: A difference between mammary epithelial cells from mature virgin and primiparous mice. Cancer Res. 38: 4059–4065, 1978.
29. Smith GH: Evidence for a precursor-product relationship between intracytoplasmic A particles and mouse mammary tumor virus cores. J. Gen. Virol. 41: 193–200, 1978.
30. Kidwell WR, Monaco ME, Wicha MS, and Smith GH: Unsaturated fatty acid requirements for growth and survival of a rat mammary tumor cell line. Cancer Res. 38: 4091–4100, 1978.
31. Smith GH, Pauley R, Socher R, and Medina D: Chemical carcinogenesis in C3H/StWi mice, a worthwhile experimental model for breast cancer. Cancer Res. 38: 4504–4509, 1978.
32. Arthur LO, Long CW, Smith GH, and Fine DL: Immunological characterization of the low molecular weight DNA binding protein of mouse mammary tumor virus. Int. J. Cancer 22: 433–440, 1978.
33. Henry TJ and Smith GH: Molecular relationship of the DNA and RNA of intracytoplasmic A particles to mouse and mammary tumor virus genomes. J. Gen. Virol. 45: 341-350, 1979.
34. Price FM, Gantt R, Camalier R, Taylor W, Smith GH, and Sanford KK: A new culture medium for human skin epithelial cells. In Vitro 16: 147–158, 1980.
35. Smith GH, Mirski MA, and Arthur LO: DNA binding and unwinding activities associated with intracytoplasmic A particles isolated from mouse mammary tumors. J. Gen. Virol. 49: 263–272, 1980.

36. Price FM, Gantt R, Camalier R, Taylor W, Smith GH and Sanford KK: A new culture medium for human skin epithelial cells. In Vitro 16: 147-158, 1980.
37. Smith GH, Arthur LO, and Medina D: Evidence of separate pathways for viral and chemical carcinogenesis in C3H/StWi mouse mammary glands. Int. J. Cancer 26: 373–380, 1980.
38. Smith GH, Teramoto YA, and Medina D: Hormones, chemicals and proviral gene expression as contributing factors during mammary carcinogenesis in C3H/StWi mice. Int. J. Cancer 27: 81–86, 1981.
39. Smith GH and Vonderhaar BK: Functional differentiation in mouse mammary gland epithelium is attained through DNA synthesis, inconsequent of mitosis. Dev. Biol. 88: 167–179, 1981.
40. Vonderhaar BK and Smith GH: Dissociation of cytological and functional differentiation in virgin mouse mammary gland during DNA synthesis inhibition. J. Cell Sci. 53: 97–114, 1982.
41. Medina D, Socher SH, Smith GH, Dusing-Swartz S, Arthur LO, and Butel JS: Separate pathways for viral and chemical carcinogenesis in the mouse mammary gland. In: Biological Carcinogenesis, M Rich and P Furmanski, (Eds), Marcel Dekker, Inc., New York, 1981.
42. Smith GH and Vlahakis G: Separation of high mammary tumor incidence from high hepatoma incidence in backcross mice during segregation of the viable yellow gene. Int. J. Cancer 29: 587–590, 1982.
43. Smith GH, Henry TJ, Vlahakis G, and Arthur LO: Suppression of spontaneous mammary tumorigenesis despite Mtv-1 gene expression in hybrid and backcross C3HA$^{vy}$ f B x C3H/Sm mice. Int. J. Cancer 29: 591–598, 1982.
44. Drohan WN, Benade LE, Graham DE, and Smith GH: MMTV proviral sequences congenital to C3H/Sm mice are differentially hypomethylated in chemically-induced, virus-induced and spontaneous mammary tumors. J. Virol. 43: 876–884, 1982.
45. Hogan DL and Smith GH: Unconventional application of standard light and electron immunocytochemical analysis to aldehyde-fixed, araldite-embedded tissues. J. Histochem. Cytochem. 30: 1301–1306, 1982.
46. Graham DE, Medina D, and Smith GH: Increased concentration of an indigenous proviral LfR (MMTV) containing transcript is associated with neoplastic transformation of mammary epithelium in C3H/Sm mice. J. Virol. 49: 819–827, 1984.
47. Smith GH, Vonderhaar BK, Graham DE, and Medina D: Expression of pregnancy-specific genes in preneoplastic mammary tissues of virgin mice. Cancer Res. 44: 3426–3437, 1984.
48. Kidwell WR, Bano M, Vonderhaar BK, and Smith GH: Substratum modulates nutrient requirements and growth factor dependency of normal mammary cells in culture. In: Growth and Differentiation in Cells in Defined Environments, Bames D, Mather J, and Sato G (Eds.): Murakami H (Ed), Springer-Verlag, Hamburg, pp. 103–108, 1985.
49. Vaage J, Smith GH, Asch BB, and Teramoto YA: Mammary tumorigenesis and tumor morphology in 4 C3H sublines with and without exogenous MMTV. Cancer Res. 46: 2096–2100, 1986.

50. Smith GH, Doherty PJ, Stead RB, Gorman CM, Graham DE, and Howard BH: Detection of transcription and translation in situ with biotinylated molecular probes in cells transfected with recombinant DNA plasmids. Anal. Biochem. 156:17–24, 1986.
51. Smith GH: In situ detection of transcription in transfected cells using Biotin-labeled molecular probes. In: Molecular Genetics of Mammalian Cells, Methods in Enzymology Vol. 151, Gottesman MM (Ed), Colowick/Kaplan Academic Press, Orlando, pp. 530–539 1987.
52. Smith GH: Overt and cryptic functions of the mouse mammary tumor virus long terminal repeat DNA sequence. In: Cellular and Molecular Biology of Experimental Mammary Cancer, Medina D, Kidwell W, Heppner G, and Anderson E (Eds), Plenum, New York, pp. 335–351, 1987.
53. Smith GH, Young LTJ, Benjamini E, Medina D, and Cardiff RD: Proteins antigenically related to peptides encoded by the mouse mammary tumor virus long terminal repeat sequences are associated with intracytoplasmic A particles. J. Gen. Virol. 68: 473–486, 1987.
54. Smith GH: Functional differentiation of virgin mouse mammary epithelium in explant cultures is dependent upon extracellular proline. J. Cell. Physiol. 131: 190–199, 1987.
55. Medina D, Schwartz M, Taha M, Oborn DJ, and Smith GH: Expression of differentiation-specific proteins in preneoplastic mammary tissues in BALB/C mice. Cancer Res. 47: 4686–4693, 1987.
56. Smith GH and Medina D: A morphologically distinct candidate for an epithelial stem cell in mouse mammary gland. J. Cell Science 89: 173–183, 1988.
57. Liscia DS, Doherty PJ, and Smith GH: Localization of a-casein gene transcription in sections of epoxy-resin-embedded mouse mammary tissues by *in situ* hybridization. J. Histochem. Cytochem. 36: 1503–1510, 1988.
58. Ali IU, Campbell G, Merlo GR, Smith GH, Callahan R, and Lidereau R: Multiple genetic alterations in human breast cancer and their possible prognostic significance. In: Cold Spring Harbor Symposium on Cancer Cells Vol. 7. Molecular Diagnostics of Human Cancer, pp. 399–408, 1989.
59. Smith GH, Mehrel T, and Roop DR: Differential keratin gene expression in developing differentiating preneoplastic and neoplastic mouse mammary epithelium. Cell Growth & Diff. 1: 161–170, 1990.
60. Liscia DS, Merlo G, Ciardiello F, Kim N, Smith GH, Callahan R, and Salomon DS: Transforming growth factor-a messenger RNA localization in the developing adult rat and human mammary gland by in situ hybridization. Dev. Biol. 140: 123–131, 1990.
61. Jhappan C, Stahle C, Harkins RN, Fausto N, Smith GH, and Merlino GT: TGFa overexpression in transgenic mice induces liver neoplasia and abnormal development in mammary gland and pancreas. Cell 61: 1137–1146, 1990.
62. Valverius EM, Ciardiello F, Heldin NE, Blondel B, Merlo G, Smith GH, Stampfer MR, Lippman ME, Dickson RB, and Salomon DS: Stromal influences on transformation of human mammary epithelial cells overexpressing c-myc and SV40T. J. Cell Physiol. 145: 207–216, 1990.
63. Medina D and Smith GH: In search of mammary gland stem cells. Protoplasma 159: 77–84, 1990.
64. Merlino GT, Mickisch G, Jhappan C, Galski H, Takagi H, Smith GH, Fausto N, Pastan I, and Gottesman MM: Cellular proliferation and drug resistance in transgenic mice. In:

Biotechnology of Cell Regulation, Verna R, NishicukaY (Eds), Raven Press, New York, pp. 271-283, 1991.

65. Smith GH, Gallahan D, Zweibel JA, Freeman SM, Bassin RH, and Callahan R: Long term in vivo expression of genes introduced by retroviral mediated transfer into mammary epithelial cells. J. Virol 65: 4550–4554, 1991.
66. Burdon T, Wall RJ, Shamay A, Smith GH, and Hennighausen L: Over-expression of an endogenous milk protein gene in transgenic mice is associated with impaired mammary alveolar development and a Michlos phenotype. Mech. Dev. 36: 67–74, 1991.
67. Callahan R, Gallahan D, Smith GH, Cropp C, Merlo G, Venesio T, Liscia D and Lidereau R: Common genetic pathways in breast oncogenesis. Path. Biol. (Paris) 39: 910-911, 1992.
68. Callahan R, Cropp C, Gallahan D, Liscia D, Merlo G, Smith GH, Lidereau R: The genetic pathology of breast cancer. In: Comparative Molecular Carcinogenesis, Wiley Liss, New York, pp. 117–136, 1992.
69. Jhappan C, Gallahan D, Stahle C, Chu E, Smith GH, Merlino G, and Callahan R: Expression of an activated notch related int-3 transgene interferes with cell differentiation and induces neoplastic transformation in mammary and salivary glands. Genes Dev. 6: 345–355, 1992.
70. Schwartz MS, Smith GH, and Medina D: The effect of parity, tumor latency and transplantation on the activation of int loci in MMTV-induced transplanted C3H mammary preneoplasias and their tumors. Int. J. Cancer 51: 805–811, 1992.
71. Takagi H, Jhappan C, Sharp R, Takayama H, Smith GH, and Merlino G: TGFa induced proliferative changes in transgenic mice. In: Growth Factors, Peptides and Receptors Moody TW (Ed), Plenum Press, New York, 355-366, 1993.
72. Jhappan D, Geiser AG, Kordon EC, Bagheri D, Hennighausen L, Roberts AB, Smith GH, and Merlino G: Targeting expression of a transforming growth factor b1 transgene to the pregnant mammary gland inhibits alveolar development and lactation. EMBO J. 12: 1835-1845, 1993.
73. Callahan R, Gallahan D, Smith GH, Cropp C, Merlo G, Diella F, Liscia D, and Lidereau R: Frequent mutations in breast cancer. Breast Cancer: From Biology to Therapy. Ann. NY Acad. Scis. 68: 21-30, 1993.
74. Hennighausen L, McKnight R, Burdon T, Baik M, Wall RJ, and Smith GH: Whey acidic protein extrinsically expressed from the Mouse Mammary Tumor Virus Long Terminal Repeat (MMTV-LTR) results in hyperplasia of the coagulation gland epithelium and impaired mammary development. Cell Growth & Diff. 5: 607-613, 1994.
75. Yang Y, Spitzer E, Kenney N, Zschiesche W, Li M, Kromminga A, Muller T, Spener F, Veerkamp JH, Smith GH, Salomon DS, and Grosse R: Members of the fatty acid binding protein family are differentiation factors for the mammary gland. J. Cell Biol. 127: 1097-1109, 1994.
76. Kordon EC, McKnight RA, Jhappan C, Hennighausen L, Merlino G, and Smith GH: Ectopic TGFb1 expression in the secretory mammary epithelium induces early senescence of the epithelial stem cell population. Dev. Biol. 148: 47-61, 1995.
77. Marchetti A, Buttitta F, Miyazaki S, Gallahan D, Smith GH, and Callahan R: Int6, a highly-conserved, widely-expressed gene is mutated by mouse mammary tumor virus in mammary preneoplasia. J. Virol. 69: 1932-1938, 1995.

78. Smith GH, Gallahan D, Diella F, Jhappan C, Merlino G, and Callahan R: Constitutive expression of a truncated Int3 gene in mouse mammary epithelium impairs differentiation and functional development. Cell Growth and Diff. 6: 563-577, 1995.
79. Kenney NJ, Huang R-P, Johnson GR, Wu J-X, Okamura D, Matheny W, Kordon EC, Gullick WJ, Plowman G, Smith GH, Salomon DS, and Adamson ED: Detection and location of Amphiregulin and Cripto-1 expression in the developing postnatal mouse mammary gland. Mol. Reproduction and Dev. 41: 277-286, 1995.
80. Robinson GW, McKnight RA, Smith GH, and Hennighausen L: Mammary epithelial cells undergo secretory differentiation in cycling virgins but require pregnancy for the establishment of terminal differentiation. Development 121: 2079-2090, 1995.
81. Kordon EC, Smith GH, Callahan R, and Gallahan D: A novel non-MMTV activation of the Int-3 gene in a spontaneous mouse mammary tumor. J. Virol. 69: 8066-8069, 1995.
82. Smith GH, Sharp R, Kordon EC, Jhappan C, and Merlino G: Transforming Growth Factor-aa promotes mammary tumorigenesis through selective survival and growth of secretory epithelial cells. Amer. J. Pathol. 147: 1081-1096, 1995.
83. Ammundadottir T, Johnson MD, Merlino G, Smith GH, and Dickson RB: Synergistic interaction of Transforming Growth Factor-a and c-myc in mouse mammary and salivary tumorigenesis. Cell Growth and Diff. 6: 737-748, 1995.
84. Kenney NJ, Smith GH, Maroulakou IG, Green JH, Muller WJ, Callahan R, Salomon DS, and Dickson RB: Detection of Amphiregulin and Cripto-1 in mammary tumors from transgenic mice. Mol. Carcinogenesis 15: 44-56, 1996.
85. Smith GH: Experimental mammary epithelial morphogenesis in an in vivo model: Evidence for distinct cellular progenitors of the ductal and lobular phenotype. Breast Cancer Res. Treat. 39: 21-31, 1996.
86. Gallahan D, Jhappan C, Robinson G, Hennighausen L, Sharp R, Kordon E, Callahan R, Merlino G and Smith GH: Expression of a truncated INT3 gene in developing secretory mammary epithelium specifically retards lobular differentiation resulting in tumorigenesis. Cancer Res. I56: 1775-1785, 1996.
87. Robinson GW, Smith GH, Gallahan D, Zimmer A, Furth PA, and Hennighausen L: Understanding mammary gland development through the imbalanced expression of growth regulators. Dev. Dynamics 206: 159-168, 1996.
88. Kenney NJ, Hosick H, Herrington G, and Smith GH: The Aged Mammary Gland. In: ILSI Monographs on the Pathobiology of the Aging Animals: Pathobiology of the Aging Mouse Vol. 2. U Mohr, DL Dungworth, J Ward, CC Capen, W Carlton, and J Sundberg (Eds.), ILSI Press, Washington, DC, pp. 369-379, 1996.
89. Smith GH: TGF-b and functional differentiation. J. Mammary Gland Biol. & Neoplasia 1: 341-350, 1996.
90. Kenney NJ, Smith GH, Rosenberg K, Cutler ML and Dickson RB: Induction of ductal morphogenesis and lobular hyperplasia by amphphiregulin in the mouse mammary gland. Cell Growth & Diff. 7: 1769-1781, 1996.
91. Kannan S, De Santis M, Lohmeyer M, Riese DJ II, Smith GH, Hynes N, Seno M, Brandt R, Bianco C, Persico G, Kenney N, Normanno N, Martinez-Lacaci I, Ciardiello F, Stern DF, Gullick WJ, and Salomon DS: Cripto enhances the tyrosine phosphorylation of Shc and activates mitogen-activated protein kinase (MAPK) in mammary epithelial cells. J. Biol. Chem. 272: 3330-3335, 1997.

92. Chepko G and Smith GH: Three division-competent, structurally distinct cell populations contribute to murine mammary epithelial renewal. Tissue & Cell 29: 239-253, 1997.
93. Kordon EC and Smith GH: Int3, A Novel-NOTCH-Related gene in Mammary Gland Development and Neoplasia. In: Hormones and Growth Factors in Development and Neoplasia. RB Dickson and DS Salomon (Eds.), Wiley-Liss Press, Inc., New York, N.Y. pp. 383-395, 1998.
94. Kenney NJ, Smith GH, Johnson M, Rosenberg K, Salomon DS and Dickson RB: CRIPTO-1 activity in the intact and ovarectomized virgin mouse mammary gland. Pathogenesis 1: 57-71, 1997.
95. De Santis ML, Kannan S, Smith GH, Seno M, Bianco C, Kim N, Martinez-Lacaci I, Wallace-Jones B, and Salomon DS: CRIPTO-1 inhibits b-casein expression in mammary epithelial cells through a p21$^{ras-}$ and phosphatidylinositol-3 kinase-dependent pathway. Cell Growth & Diff. 8: 1257-1266, 1997
96. Kordon EC and Smith GH: An entire functional mammary gland may comprise the progeny from a single cell. Development 125(10): 1921-1930, 1998.
97. Liu X, Gallego MI, Smith GH, Robinson GW, and Hennighausen L: Functional rescue of Stat5a-null mammary tissue through the activation of compensating signals including Stat5b. Cell Growth & Diff. 9: 795-803, 1998.
98. Daniel CW and Smith GH: The mammary gland: A model for development. J. Mammary Gland Biology & Neoplasia 4: 3-8, 1999
99. Chepko G and Smith GH: Mammary epithelial stem cells: our current understanding. J. Mammary Gland Biology & Neoplasia 4: 35-52, 1999.
100. Medina D and Smith GH: The parous involuted mouse mammary gland is refractory to chemical-induced tumorigenesis. J. Natl. Cancer Inst. 91(11): 967-969, 1999.
101. Heppner GH, Wolman SR, Rosen J, Salomon DS, Smith GH and Mohla S: Research potential of a unique xenograft model of human proliferative breast disease. Breast Cancer Res. Treat. 58: 183-186, 1999.
102. Callahan R and Smith GH: MMTV-induced mammary tumorigenesis: gene discovery, progression to malignancy and cellular pathways. Oncogene 19: 992-1001, 2000.
103. Rasmussen S, Young LJT and Smith GH: Preparing Mammary Gland Whole Mounts from Mice. In: Methods in Mammary Gland Biology and Cancer Researh,. Ip & Ash (Eds), Plenum, New York, pp. 75-85, 2000.
104. Krebs LT, Xue Y, Norton CR, Shutter JR, Maguire M, Sundberg JP, Gallahan D, Closson V, Kitajewski J, Callahan R, Smith GH, Stark KH and Gridley T: Notch signaling is essential for vascular morphogenesis in mice. Genes Dev. 14: 1343-1352, 2000.
105. Smith GH and Chepko G: Mammary epithelial stem cells. Microscopy Res. & Tech. 52: 190-203, 2001.
106. Buggiano V, Schere-Levy C, Abe K, Vanzulli S, Piazzon I, Smith GH, and Kordon EC: Impairment of mammary lobular development induced by expression of TGF-b1 under the control of the WAP promoter does not suppress tumorigenesis in MMTV-infected transgenic mice. Int. J. Cancer 92: 568-576, 2001.
107. Boulanger CA and Smith GH: Reducing mammary cancer risk through premature stem cell senescence. Oncogene 20: 2264-2272, 2001.

108. Rasmussen SB, Kordon EC, Callahan R and Smith GH: Evidence for the transforming activity of a truncated Int6 gene, *in vitro*. Oncogene 20: 5291-5301, 2001.
109. Miyoshi K, Shillingford J, Smith GH, Grimm SL, Wagner K-U, Oka T, Rosen JM, Robinson GW, and Hennighausen L: Determination of mammary alveolar epithelium is controlled by a pathway including the prolactin receptor, Jak2 and Stat5. J. Cell Biol. 155: 531-542, 2001.
110. Wagner K-U, Boulanger CA, Henry MD, Sgagias M, Hennighausen L and Smith GH: An adjunct mammary epithelial cell population in parous females: its role in functional adaptation and tissue renewal. Development 129: 1377-1386, 2002.
111. Smith GH: Mammary cancer and epithelial stem cells: a problem or a solution? Breast Cancer Res. 4: 47-50, 2002.
112. Bern H, Faulkin L, Daniel C, Smith GH, Young L, Gardner M, Wellings S, Shyamala G, Guzman R, Rajikumar L, Yang J, Thordarson G, Nandi S, Medina D, MacCleod C, Oshima R, Man A, Sawai E, Gregg J, Cheung A, Lau D, Cardiff R: Contributions of mouse biology to breast cancer research. Comparative Med. 52:12-31, 2002.
113. Shyamala G, Chou Y-C, Guzman RC, Smith GH, and Nandi S: Cellular expression of estrogen and progesterone receptors in mammary glands: regulation by hormones, development and aging. J. Steroid Biochem. & Mol. Biol. 80: 137-138, 2002.
114. Miyoshi K, Meyer B, Gruss P, Cui Y, Renou J-P, Morgan FV, Smith GH, Reichstein M, Shani M, Hennighausen L and Robinson GW: Mammary epithelial cells are not able to undergo pregnancy dependent differentiation in the absence of the helix-loop-helix inhibitor Id2. Mol. Endo. 16: 2892-2901, 2002.
115. Smith GH and Vonderhaar BK: Re: Immunocytochemical demonstration of caseins in mouse mammary glands. J. Histochem and Cytochem. 50: 997-998, 2002.
116. Smith GH, Strickland P, and Daniel CW: Putative stem cell loss corresponds with mammary growth senescence. Cell & Tissue Res. 310: 313-320, 2002.
117. Smith GH and Boulanger CA: Mammary stem cell repertoire: New insights in aging epithelial populations. Mech. Aging and Dev. 123: 1505-1519, 2002.
118. Wagner K-U, Boulanger CA, Henry MD, Sgagias M, Hennighausen L and Smith GH: An adjunct mammary epithelial cell population in parous females: its role in functional adaptation and tissue renewal. Development 129: 1377-1386, 2002.
119. Smith GH and Boulanger CA: Mammary epithelial stem cells: transplantation and self-renewal analysis. Cell Prolif. 36: 3-15, 2003.
120. Smith GH: Mammary Epithelial Stem Cells. In: Stem Cells Handbook, Sell S (Ed), Humana Press, Inc., Totowa, N.J. pp. 437-443, 2004.
121. Smith GH and Boulanger CA: Stem Cells in Mammary Epithelium. In: Handbook of Stem Cells Vol. 2: Adult and Fetal Stem Cells, Lanza R, Blau H, Melton D, Moore M, Thomas ED, Verfaille C, Weissman I, West M (Eds), Elsevier Academic Press, San Diego, pp: 257-268, 2004.
122. Nemade RV, Bierie B, Nozawa M, Bry C, Smith GH, Vasioukhin V, Fuchs E, and Hennigshausen L: Biogenesis and function of mouse mammary epithelium depends on the presence of functional a-catenin. Mech. Dev. 121: 91-99, 2004.
123. Henry M. Triplett AA, Oh KB, Smith GH, Wagner K-U: Parity-induced mammary epithelial cells facilitate tumorigenesis in MMTV-neu transgenic mice. Oncogene 23: 6980-6985, 2004.

124. Boulanger CA, Wagner K-U, Smith GH: Parity-induced mouse mammary epithelial cells are pluripotent, self-renewing and sensitive to TGF-b1 expression. Oncogene 24: 552-560, 2005.
125. Smith GH: Long label-retaining mammary epithelial cells divide asymmetrically and retain their template DNA strands. Development 132: 681-687, 2005.
126. Wagner K-U and Smith GH: Pregnancy and stem cell behavior. J. Mammary Gland Biology & Neoplasia 10: 25-36, 2005.
127. Clarke RB and Smith GH: Stem cells and tissue homeostasis in mammary glands. .J Mammary Gland Biology & Neoplasia 10: 1-3, 2005.
128. Triplett AA, Sakamoto K, Matulka LA, Shen L, Smith GH, Wagner K-U: Expression of Whey Acid Protein (Wap) is necessary for adequate nourishment of the offspring but not terminal differentiation of mammary epithelial cells. Genesis 43:1-11, 2005.
129. Smith GH: Stem cells and mammary cancer in mice. Stem Cell Reviews 1:215-224, 2005
130. Smith GH and Clarke RB: Stem Cells in Mammary Epithelium. In: Tissue Stem Cells: Biology and Applications, C.Potten (Ed), Taylor and Francis, London, UK, pp. 71-88, 2006.
131. Smith GH: Mammary stem cells come of age, prospectively. Trends Mol. Med. 7: 287-289, 2006.
132. Booth BW and Smith GH: Estrogen receptor-alpha and progesterone receptor are expressed in label-retaining mammary epithelial cells that divide asymmetrically and retain their template DNA strands. Breast Cancer Res. 8(4): R49, 2006.
133. Smith GH: Stem Cells, Hormones and Mammary Cancer. In: Hormonal Carcinogenesis V, J Li and S Li (Eds), Springer, pp. 202-234, 2007.
134. Booth BW, Jhappan C, Merlino G, Smith GH: TGFbeta1 and TGFalpha contrarily affect alveolar survival and tumorigenesis in mouse mammary epithelium. Int. J. Cancer 120: 493-499, 2007.
135. Boulanger CA, Booth BW, Mack DL, Smith GH: The mammary gland microenvironment redirects spermatogenic cell fate, in vivo. Proc. Nat. Acad. Sci. (USA) 104: 3871-3876, 2007.
136. Booth BW, Boulanger CA, Smith GH: Alveolar progenitor cells develop in mouse mammary glands independent of pregnancy and lactation. J. Cell. Physiol. 212: 729-736, 2007.
137. Mack DM, Boulanger CA, Callahan R, Smith GH: Expression of truncated Int6/eIF3e in mammary alveolar epithelium leads to persistent hyperplasia and tumorigenesis Breast Cancer Res. 9: R42, 2007.
138. Booth BW and Smith GH: Roles of transforming growth factor-α in mammary development and disease. Growth Factors 25(4): 227-235, 2007.
139. Smith GH and Medina D: Re-evaluation of mammary stem cell biology based on in vivo transplantation. Breast Cancer Res. 10(1): 203, 2008.
140. Booth BW, Boulanger CA and Smith GH: Selective segregation of DNA strands persists in label-retaining mammary cells during pregnancy. Breast Cancer Res. 10(5): R90, 2008.
141. Booth BW, Mack DM, Androutsellis-Theotokis A, McKay R, Boulanger CA, and Smith GH: The Mammary microenvironment alters the differentiation repertoire of neural stem cells. Proc. Natl. Acad. Sci. USA 105(39): 14891-14896, 2008.
142. Callahan R and Smith GH: Common integration sites for MMTV in viral induced mouse mammary tumors. JMGBN 13: 309-322, 2008.

143. Booth BW, Boulanger CW and Smith GH: Stem Cells and the mammary microenvironment. Breast Disease 29: 57-67, 2008.
144. Smith GH: Mouse Mammary Tumor Virus: Stem Cells and Mammary Cancer. In: Stem Cells and Cancer, RG Bagley & BA Teicher (Eds), Springer/Humana, NY, 2008.
145. Strizzi L, Mancino M, Bianco C, Raafat A, Gonzales M, Booth BW, Watanabe K, Nagaoka T, Mack DM, Howard B, Callahan R, Smith GH and Salomon DS: Netrin-1 can affect morphogenesis and differentiation of the mouse mammary gland. J. Cellular Physiol. 216: 824-834, 2008.
146. Mack DL, Smith GH and Booth BW: Mammary Glands, Stem Cells and Breast Cancer. In: Breast Cancer in the Post-Genomic Era, E Giordano & N Normanno (Eds), Springer, NY, pp. 19-38, 2009.
147. Booth BW, Boulanger CA, Anderson, LH and Smith GH: Suppression of the tumorigenic phenotype in normally developing mammary glands. Oncogene 30(6): 679-89, 2011.
148. Booth BW, Boulanger CA, Anderson LH, Jimenez-Rojo L, Brisken C and Smith GH: Amphiregulin mediates self-renewal in an immortal mammary epithelial cell line with stem cell characteristics. Exp. Cell Res. 316: 422-432, 2010.
149. Bussard KM, Boulanger CA, Booth BW, Bruno RD and Smith GH: Human cancer cells are reprogrammed in the mouse mammary gland. Cancer Res. 70: 6336-6343, 2010.
150. Bussard KM, Boulanger CA, Kittrell FS, Behbod F, Medina D, and Smith GH: Immortalized, pre-malignant epithelial cell populations contain long-lived, label-retaining cells that asymmetrically divide and retain their template DNA. Breast Cancer Res. 12(5): R86, 2010.
151. Bruno RD and Smith GH: Functional characterization of stem cell activity in the mouse mammary gland. Stem Cells Reviews and Reports 7(2): 238-47, 2010.
152. Anderson LH, Boulanger CA, Smith GH, Carmeliet P, and Watson CJ: Stem cell marker Prominin-1 regulates branching morphogenesis, but not regenerative capacity in the mammary gland. Dev. Dynamics 240: 674-681, 2011.
153. Bussard KM and Smith GH: The Mammary Gland Microenvironment Directs Progenitor Cell Fate In Vivo. Int. J. Cell Biol. 2011: 451676, 2011.
154. Bruno RD, Boulanger CA, Smith GH: Notch-induced mammary tumorigenesis does not involve the lobule-limited epithelial progenitor. Oncogene 31(1): 60-7, 2011.
155. Boulanger CA, Bruno RD, Rosu-Myles M, Smith GH: The Mouse Mammary Microenvironment redirects Mesoderm-derived Bone Marrow Cells to a Mammary Epithelial Progenitor Cell Fate. Stem Cells and Dev. 12(6): 948-54, 2011.
156. Bruno RD and Smith GH: Role of epithelial/progenitor cells in mammary cancer. Gene Expression 15: 133-149, 2011.
157. Visvader J and Smith GH: Murine mammary epithelial stem cells: discovery, function and current status. Cold Spring Harbor Pers.: The Mammary Gland, 3: a004879, 2011.
158. Smith GH: Biology of mammary gland development. Semin. Cell Dev. Biol. 23(5): 546, 2012.
159. Bruno RD and Smith GH: Reprogramming non-mammary and cancer cells in the developing mouse mammary gland. Seminars in Cell & Dev. Biol. 23: 591-598, 2012.
160. Raafat A, Strizzi L, Lashin K, Ginsburg E, McCurdy D, Salomon DS, Smith GH, Medina D, Callahan R: Effects of age and parity on mammary gland lesions and progenitor cells in the FVB/N-RC mice. PLOS One 7(8): e43624, 2012.

161. Callahan R, Mudunuri U, Bargo S, Raafat A, McCurdy D, Boulanger CA, Lowther W, Stephens R, Luke BT, Stewart C, Munroe D, and Smith GH: Genes affected by mouse mammary tumor virus (MMTV) proviral insertions in mouse mammary tumors are deregulated or mutated in primary human mammary tumors. Oncotarget 3: 1320-1334, 2012.
162. Bussard KM and Smith GH: Human breast cancer cells are redirected to mammary epithelial cells upon interaction with the regenerating mammary gland microenvironment *in vivo*. PLOS One 7(11): e49221, 2012.
163. Boulanger CA, Bruno RD, Mack DL, Gonzales M, Castro N, Salomon DS, Smith GH: Embryonic stem cells are redirected to non-tumorigenic epithelial cell fate by interaction with the mammary microenvironment. PLOS One 8(4): e62019, 2013.
164. Wagner K-U, Booth BW, Boulanger CA, and Smith GH: Multipotent PI-MECs are the true targets of MMTV-neu tumorigenesis. Letter to the Editor Oncogene 32(10): 1338, 2013.
165. Booth BW, Medina, D, and Smith GH: Mammary Epithelial Stem Cells. In: Stem Cells Handbook II, S Sell (Ed) Springer Science + Business Media, NewYork, NY, pp. 245-254, 2013.
166. Bruno RD, Rosenfield SM, and Smith GH: Late developing mammary tumors and hyperplasia induced by a lo-oncogenic variant of mouse mammary tumor virus (MMTV) express genes identical to those induced by canonical MMTV. Mol. Cancer 12: 79-85, 2013.
167. Rosenfield SM and Smith GH: Redirection of human cancer cells upon the interaction with the regenerating mouse mammary gland microenvironment. Cells 2: 43-54, 2013.
168. Bruno RD, Boulanger CA, Rosenfield SM, Anderson LH, Lydon JP, Smith GH: Paracrine-rescued lobulogenesis in chimeric outgrowths comprising progesterone-receptor-null mammary epithelium and redirected wild-type testicular cells. J. Cell Sci. 127(Pt 1): 27-32, 2014.
169. Bruno RD and Smith GH: Invited Viewpoint "A potential mechanism for extracellular matrix induction of breast cancer cell normality." Breast Cancer Res., In Press, 2014.