

CURRICULUM VITAE
DOUGLAS CARTER HIXSON

PERSONAL INFORMATION:

BORN: Chicago, Illinois

SOCIAL SECURITY #: xxx-xx-xxxx

HOME ADDRESS: Barrington, Rhode Island 02806

OFFICE ADDRESS: Division of Hematology/Oncology
Rhode Island Hospital
593 Eddy Street
Providence, Rhode Island 02903

BUSINESS TELEPHONE: 401-444-8859

EDUCATION:

1969	B.S., Mathematics	Purdue University West Lafayette, Indiana
1971	M.S., Biology/ Biochemistry	Purdue University West Lafayette, Indiana
1975	Ph.D., Biomedical Sciences	The University of Texas, Graduate School of Biomedical Science, Houston, TX

POSTGRADUATE TRAINING:

1975-76	Virology Department, University of Texas System Cancer Center, M.D. Anderson Hospital and Tumor Institute, Houston, Texas (Supervisor, James Bowen).
1976-77	Departments of Biochemistry and Virology. The University of Texas System Cancer Center. M.D. Anderson Hospital and Tumor Institute, Houston, Texas (Supervisor, E. F. Walborg, Jr.).

HONORS AND AWARDS

Rosalie B. Hite Predoctoral Fellowship	1972-75
Two Merit Scholarship Awards, The University of Texas, Graduate School of Biomedical Sciences	1975
Electron Microscope Society of America, Presidential Scholarship	1975

HOSPITAL APPOINTMENTS:

1971-72	Research Technician II, Virology Department, The University of Texas System, Cancer Center, M.D. Anderson Hospital and Tumor Institute, Houston, Texas.
1972-75	Rosalie B. Hite Predoctoral Fellow, Virology Department, The University of Texas System Cancer Center, M.D. Anderson Hospital and Tumor Institute, Houston, TX
1975-76	Project Investigator, Virology Department (Postdoctoral Fellow), The University of Texas System Cancer Center, M.D. Anderson Hospital and Tumor Institute, Houston, Texas
1976-77	Research Associate, Joint Appointment in Departments of Biochemistry and Virology. The University of Texas System Cancer Center, M.D. Anderson Hospital and Tumor Institute, Houston, Texas
1977-84	Assistant Biochemist, University of Texas System Cancer Center, M.D. Anderson Hospital and Tumor Institute, Science Park-Research Division. Smithville, TX.
1977-85	Director of Electron Microscopy Facility, Science Park-Research Division, Smithville Tx
1984-85	Associate Biochemist, The University of Texas System Cancer Center, Science Park-Research Division, Smithville, Texas
1986-94	Associate Research Oncologist, Department of Medical Oncology, Rhode Island Hospital
1994-1998	Director of Laboratory Research, Department of Medical Oncology, Rhode Island Hospital
1998-present	Director of Molecular Carcinogenesis Laboratory, Department of Medicine, Division of Hematology/Oncology, Rhode Island Hospital
2002-present	Director, COBRE Center for Cancer Research Development, Department of Medicine, Division of Hematology/Oncology, Rhode Island Hospital

ACADEMIC APPOINTMENTS

1981-85	Member, Graduate Faculty, The University of Texas Health Science Center at Houston, Graduate School of Biomedical Sciences, Houston, Texas
1981-85	Assistant Professor of Biochemistry, The University of Texas System Cancer Center, M.D. Anderson Hospital and Tumor Institute, Science Park-Research Division, Smithville, Texas
1986-1994	Associate Professor (Research), of Medicine and Pathology Brown University, Providence, R.I.
1994-present	Professor (Research), of Medicine and Pathology Brown University, Providence, R.I

REVIEW APPOINTMENTS

1983-	Reviewer for Journal of Histochemistry and Cytochemistry
1986-	Reviewer for PNAS
1986-	Reviewer for J. Cell Biology
1986-	Reviewer for Cancer Research
1987-88	Consultant for Eli Lilly and Company, Indianapolis, Indiana
1990-	Reviewer for Hepatology
1990-	Reviewer for American J Pathology
1993	Reviewer for American Journal of Physiology: Cell Physiology
1994-	Reviewer for Gastroenterology
1994	Reviewer for Journal of Biochemical and Biophysical Methods
1994	Reviewer for OCAST, Health Research Program Funding Competition
	Chair, Cell Biology/Neurocytology Study Section
1998	Director, Molecular Carcinogenesis Program, Brown/Tufts Cancer Center
2001-2004	Editorial Board for Hepatology

NIH Study Section:

1986-87	Ad-hoc Member, Chemical Pathology Study Section, NIH, Bethesda, MD
1988-90	Member, Chemical Pathology Study Section
1990-92	Chairman, Chemical Pathology Study Section
1992-	Member, National Institutes of Health Reviewers Reserve (NPR)
1992	National Institute of Health, Director's Chairperson's Meeting
1992	National Task Force on NIH Strategic Plan Panel on Peer-Review
1998-99	Member, National Research Service Award Study Section (F32) Biological and Physiological Sciences Special Emphasis Panel
2002	NIEHS study section, Review of Toxicogenomics Consortium Member Applications

OTHER APPOINTMENTS

2002	Vice President, Co-founder of Prothera Biologics, East Providence, RI
------	---

HOSPITAL COMMITTEES

Biohazard Committee, Science Park, Research Division, (SPRD)	1978
Library Committee, SPRD	1978-80
Education Committee, SPRD	1979-81
Cancer Prevention Task Force, UTSCC, M.D. Anderson Hospital	1982
Animal Resources Advisory Committee, SPRD	1982
Research Steering Committee, Rhode Island Hospital	1990-92
Radiation Safety Committee, Rhode Island Hospital	1990-92
Reviewer for Developmental Grants, Roger Williams Cancer Center	1991-93
Rhode Island Hospital Research Task Force	1992-93
Research Advisory Committee for Rhode Island Hospital	1993-95
Cancer Center Steering Committee	1993-
Research Advisory Committee of Lifespan	1995-
Advisory Committee Pediatrics Program Project Grant	1995-
Research Facility Planning Committee	1995-
Lifespan/Brown/Tufts Cancer Center Planning Committee	1997
Lifespan COMPASS Initiative, Team for Research Market Share	1998-
Member, Search Committee for Chief of Medical Oncology	1998
Department of Medicine Research Review Committee	1999-
Member, Search Committee for Cancer Center Director	1999
Chairman, Lifespan Research Advisory sub-committee on Space Allocation	2000
Member, Search Committee, Renal Division, Department of Medicine	2000
Member, Search Committee, Cancer Center Director	2002

UNIVERSITY COMMITTEES

Graduate Admissions Committee, MCB Program, Brown University	1986,1988
Summer Research Assistantship Committee, Brown University	1989-90
Member, Seminar Committee, Pathobiology Program, Brown University	1989-92
Member, Admissions Committee, Pathobiology Program, Brown University	1989-95
Member, Pathobiology Steering Committee, Brown University	1989-92
Curriculum Committee, MCB Program, Brown University	1991
Ad Hoc Committee on Graduate Programs	1992
Research Task Force Subcommittee for Faculty Relations, Brown University	1992
Member, MCB Executive Committee	1994
Member, Brown Pathology Committee on Research	1994
Member, Pathology Search Committee for Chair person	1994
Executive Committee for Brown Cancer Center	1995-
Member, Pathology Search Committee for New Faculty	1996
Member, Pathobiology Steering Committee, Brown University	1997-
Member, Pathology Advisory Committee for Research	1997-

Medical Faculty Executive Committee (MFEC)	1998-2001
Program Director, Molecular Carcinogenesis, BTCC	1998
Member, Search Committee for Director of Brown Tufts Cancer Center and Division of Hem/Onc, AMC	1998
Chairman, Curriculum Committee, Graduate Program in Pathobiology	1999
Member, Admissions Committee, Pathobiology	1999-2000
Medical Faculty Executive Committee	2005-2006

INTERNATIONAL COMMITTEES

Expert Advisory Committee for Octapharma Pharmaceuticals, Vienna, Austria	1996-1998
---	-----------

OTHER COMMITTEES

Program Committee for American Society for Investigational Pathology	2001
--	------

MEMBERSHIP IN SOCIETIES

American Association for the Advancement of Science

American Association for the Study of Liver Diseases

American Society for Cell Biology

American Society for Investigative Pathology

American Association for Cancer Research

CHAIRMANSHIPS:

1978	Co-chairman of session on "Virus-Cell Interactions", Eighteenth Annual Meeting of American Society for Cell Biology
1989	<u>President</u> of the New England Chapter of the American Association for Cancer Research
1984	Chairman of session entitled, "The Cell Surface: Membranes, Receptors and Cell-Cell Recognition", 13th Annual Gulf Coast Molecular Biology Conference, Smithville, Texas
1985	Co-chairman of session "Early Events in Carcinogenesis", 76th Annual Meeting of the American Association for Cancer Research, Houston, TX
1989	Co-chairman, NEACR Symposium on "Growth Factors"
1990	Chairman, NEACR Symposium on "Viral Carcinogenesis"
1991	Chairman, NEACR Symposium on "New Approaches to Diagnosis & Treatment"
1992	Chairman, NEACR Symposium on "Molecular Etiology of Human Cancer"
1993	Chairman, NEACR Symposium on "Genetic Therapy"
1994	Chairman, NEACR Symposium on "New Insights into Breast Cancer"

- 1995 Chairman, Poster Discussion Session on "Hepatic Regeneration, Differentiation and Carcinogenesis", Annual Meeting of the American Society for Experimental Pathology, Experimental Biology, Atlanta, GA
- 1995 Chairman, NEACR Symposium on "Cancer Prevention"
- 1996 Chairman, Poster Discussion Session on "Hepatic Regeneration, Differentiation and Carcinogenesis"; Moderator, Round Table Discussion on "Hepatic Stem Cells, Do They Exist?", Annual Meeting of the American Society for Experimental Pathology, New Orleans, LA
- 1996 Chairman, NEACR Symposium on "Cell Growth Suppressors/Regulators: Implications for Cancer Therapy", Annual Meeting Providence, RI.
- 1997 Chairman, NEACR & BrUOG Symposium on "Genetic Testing: Molecular, Psychosocial and Ethical Implications", Annual Meeting Providence, RI.
- 1998 Chairman, NEACR Symposium on "New Strategies for Combating Tumor Progression and Metastatic Disease", Annual Meeting Providence, RI.
- 1998 Co-chairman, Poster Session on "Hepatic Progenitor Cells and Regeneration", Annual Meeting of Experimental Biology, San Francisco, CA
- 2001 Chairman and organizer, 12th International CEA/PSG Symposium, July 29-August 1, Providence, RI
- 2003 Chair, ASIP Symposium, Molecular and Cellular Basis of disease: Cell Adhesion and Cell Signaling from Cell Surface of Nucleus, April 15, 2003, Experimental biology 2003, San Diego, CA
- 2003 Chair, COBRE CCRD Symposium, July 31, 2003, Molecular Events in Gastrointestinal Disease, Providence RI
- 2003 Co-Chair, COBRE CCRD Mini-Symposium, November 6, 2003, Translation Research in Cancer, Providence RI
- 2004 Co-Chair ASIP Symposium, "Controversies in Stem Cell Research, Experimental Biology 2004, Washington, DC
- 2004 Chair, COBRE CCRD Symposium, June 25, 2004, RI Convention Center, Providence RI
- 2005 Chair, COBRE CCRD Symposium, June 24, 2005, Cancer Research: The Lighthouse of Hope, RI Convention Center, Providence, RI

PUBLISHED ARTICLES:

1. Hixson, D.C. "Comparison of lectin-binding site topography and cytoagglutination of normal and RNA tumor virus-infected cells". Dissertation for Degree of Doctor of Philosophy, 1975.
2. Maruyama, K., M.F., Miller, D.C. Hixson and S.H. Wagner. "Surface properties of mammalian C-type viruses". Proceedings of VIIth International Symposium on Comparative Research on Leukemia and Related Diseases, 1975, Bibl. Haemat. 43:425, 1976.
3. Neri, G., M.D. Giuliano, S.C. Capetillo, E.B. Gilliam, D.C. Hixson and E.F. Walborg, Jr., Effect of neuraminidase and papain treatment on lectin-induced agglutination of Novikoff tumor cells and assay of lectin receptor activity of the glycopeptides released from the cell surface by papain. Cancer Res. 36:263-268, 1976.
4. Neri, G., M.D. Giuliano, S.C. Capetillo, E.B. Gilliam, D.C. Hixson and E.F. Walborg, Jr. "Regulatory role of cell surface sialic acid in lectin-induced cytoagglutination of rat hepatoma cells." Acta Medica Romana 14:432-442, 1976.

5. Starling, J.J., D.C. Hixson, E.M. Davis and E.F. Walborg, Jr. "Surface properties of adult rat hepatocytes: Mechanism of increased concanavalin A-induced agglutinability following papain digestion". Exper. Cell Res. 104:165, 1977.
6. Chan, J.C., D.C. Hixson and J.M. Bowen. "Detection of vesicular stomatitis virus (Murine Leukemia virus) pseudotypes by immunoelectron microscopy". Virology 88:171, 1978.
7. Hixson, D.C., J.M. Bowen, M. Scanlon, M. Nash and L. Dmochowski. "Strain related variations in the interaction of ferritin conjugated plant lectins with murine mammary tumor viruses". Cancer Res. 39:199, 1979.
8. Glenney, J.R., Jr., D. C. Hixson and E.F. Walborg, Jr. "Inhibition of concanavalin A-induced agglutination of rat hepatoma cells by cytochalasins and metabolic inhibitors: Role of cell-surface morphology and topography". Exper. Cell Res. 118:353-364, 1979.
9. Glenney, J.R., Jr., J.P. Allison, D.C. Hixson and E.F. Walborg, Jr. "Resolution and partial characterization of plasma membrane sialoglycoproteins of Novikoff tumor cells". J. Biol. Chem. 254 (18):9247-9253, 1979.
10. Hixson, D.C., E.F. Miller, K. Maruyama, E.F. Walborg, Jr., S. Wagner, J. J. Starling and J.M. Bowen. "A statistical evaluation of the binding of ferritin-conjugated lectins to the surface of rat cells: Topographical variations as a function of lectin concentration and cell type". J. Histochem. Cytochem. 27 (12):1618-1629, 1979.
11. Hixson, D.C., J.M. Yep, J.R. Glenney, Jr., T. Hayes and E.F. Walborg, Jr. "Evaluation of periodate/lysine/paraformaldehyde fixation as a method for cross-linking plasma membrane glycoproteins". J. Histochem. Cytochem. 29 (4): 561-566, 1981.
12. Hixson, D.C., J.P. Allison, J.E. Chesner, M.J. Leger and E.F. Walborg, Jr. "Characterization of a family of glycoproteins associated with the bile canalicular membrane of normal hepatocytes but not expressed by transplantable hepatocellular carcinomas". Cancer Res. 43:3874-3384, 1983.
13. Hixson, D.C., M.D. Ponce, J.P. Allison, E.F. Walborg, Jr. "Cell surface expression by adult rat hepatocytes of a noncollagen glycoprotein present in rat liver biomatrix". Exper. Cell Res. 152:402-414, 1984.
14. Hixson, D.C., J.P. Allison, K.D. McEntire, R.S. Nairn, J.E. Chesner, J.C. Chan, and E.F. Walborg, Jr. "Structural differences in envelope glycoproteins associated with rat leukemia viruses produced by Novikoff hepatocellular carcinoma and spontaneously transformed Wistar rat embryo cells". J. Gen. Virol. 65:743-760, 1984.
15. Hixson, D.C., K.D. McEntire and B. Obrink. "Alterations in the expression of a hepatocyte cell adhesion molecule by transplantable rat hepatocellular carcinoma". Cancer Res. 45:3742-3749, 1985.
16. Hixson, D.C. , and J. P. Allison. "Monoclonal antibodies recognizing oval cells induced in the liver of rats by N-2-fluorenylacetamide or ethionine in a choline-deficient diet". Cancer Res. 45:3750-3760, 1985.
17. Walborg, E.F., Jr., D. S. Weeden, M.W. Thomas, A. Barrick, S. Tsuchida, K.D. McEntire, J.P. Allison and D.C. Hixson. "Identification of dipeptidyl peptidase IV as a glycoprotein shared by the plasma membrane of hepatocytes and liver biomatrix". Exper. Cell Res. 158:509-518, 1985.
18. Bodenheimer, H.C., Faris, R.A., Charland, C., and Hixson, D.C. "Characterization of a new monoclonal antibody to rat macrophages and Kupffer cells", Hepatology 8:1667-1672, 1988.
19. McMillan, P.N., Hevey, K.A. Hixson, D.C., and Jauregui, H. O. "Hepatocyte cell surface polarity as demonstrated by lectin binding to isolated and cultured hepatocytes", J. Histochem Cytochem. 36:1561-1571, 1988.
20. Hong, W., Petell, J.K., Swank, D., Sanford, J., Hixson, D.C., and Doyle, D. "Expression of dipeptidyl peptidase IV in rat tissues is mainly regulated at the mRNA levels". Exp. Cell Res. 182:256-266, 1989.
21. Faris, R.A. and Hixson, D.C. "Selective proliferation of chemically-altered rat liver epithelial cells following hepatic transplantation". Transplantation, 48: 87-92, 1989.

22. McEntire, K.D., Mowery, J., and Hixson, D.C. "Comparison of the structural characteristics of cell-CAM 105 from hepatocytes with those of an altered form expressed by rat transplantable hepatocellular carcinomas". Cancer Res. 49:6795-6802, 1989.
23. Hixson, D.C., and McEntire, K.D. "Detection of an altered form of cell-CAM 105 on rat transplantable and primary hepatocellular carcinomas". Cancer Res. 49:6788-6794, 1989.
24. Piazza, G.A., Callanan, H.M., Mowery, J., and Hixson, D.C. "Evidence for a role of dipeptidyl peptidase IV in fibronectin-mediated interactions of hepatocytes with extracellular matrix". J. Biochem., 262:327-334, 1989.
25. Mowery, J., Chesner, J, Spangenberg, S., and Hixson, D.C. "Rapid low molecular weight polyethylene glycol embedding protocol for immunocytochemistry". J. Histochem Cytochem., 37:1549-1552, 1989.
26. Hong, W., Piazza, G.A., Hixson, D.C., and Doyle, D.: "Expression of enzymatically active rat dipeptidyl peptidase IV in Chinese hamster ovary cells after transfection." J. Biochem., 28:8474-8479, 1989.
27. Goyette, M., Faris, R., Braun, L., Hixson, D., and Fausto, N.: "Expression of hepatocyte and oval cell antigens in hepatocellular carcinomas produced by oncogene-transfected liver epithelial cells." Cancer Res., 50:4809-4817, 1990.
28. Faris, R.A., McEntire, K.D., Thompson, N.L., Hixson, D.C.: "Identification and characterization of a rat hepatic oncofetal membrane glycoprotein". Cancer Res., 50:4755-4763, 1990.
29. Petell, J.K., Quaroni, A., Hong, W., Hixson, D.C., Amarri, S., Reif, S., Bujanover, Y. "Alteration in the regulation of plasma membrane glycoproteins of the hepatocyte during ontogeny". Exp. Cell Res., 187:299-308, 1990.
30. Hixson, D.C., Faris, R.A., Thompson, N.L., "An antigenic portrait of the liver during carcinogenesis." Pathobiology, 58: 65-77, 1990.
31. Faris, R.A., Monfils, B.A., Dunsford, H.A., and Hixson, D.C. "Antigenic relationship between oval cells and a subpopulation of hepatic foci, nodules, and carcinomas induced by the 'resistant hepatocyte' model system." Ca. Res., 51:1308-1317, 1991.
32. Nancy L. Thompson, Douglas C. Hixson, Helen Callanan, Marilyn Panzica, Donna Flanagan, Ronald A. Faris, Wanjin Hong, Sabine Hartel-Schenk, and Darrell Doyle. "A Fischer rat substrain deficient in dipeptidyl peptidase IV activity makes normal steady-state RNA levels and an altered protein." Biochem. J., 273: 497-502, 1991.
33. Mowery, J.M., Hixson, D.C. "Detection of cell-CAM 105 in the pericanalicular domain of the rat hepatocyte plasma membrane." Hepatology, 13:47-56, 1991.
34. Lin, S.-H., Culic, O., Flanagan, D., and Hixson, D.C., "Immunochemical characterization of two isoforms of rat liver ecto-ATPase that show an immunological and structural identity with glycoprotein cell-adhesion molecule with Mr 105000". Biochem. J. 278:155-161, 1991.
35. Novikoff, P.M., Ikeda, T., Hixson, D.C., and Yam, A., "Characterization of and interactions between bile ductules and hepatocytes in early stages of rat hepatocarcinogenesis induced by ethionine". Am. J. Pathol. 139: 1351-1368, 1991.
36. Culic, O., Huang, Q., Flanagan, D., Hixson, D.C., Lin, S.-H., "Molecular cloning and expression of new rat liver cell-CAM 105 isoform: Differential phosphorylation of isoforms". Biochem. J., 285, 47-53, 1992.
37. Cheung, P., Thompson, N., Earley, K., Culic, O., Hixson, D., and Lin, S.-H., "Cell-CAM 105 isoforms with different adhesion functions are coexpressed in adult rat tissues and during liver development". J. Biol. Chem., 268:6139-6146, 1993.

38. Yang, L., Faris, R.A., and Hixson, D.C., "Long term culture and characteristics of normal rat liver bile duct epithelial cells". Gastroenterology, 104:840-852, 1993.
39. Thompson, N.L., Panzica, M., Hull, G., Lin, S.-H., Curran, T.R., Gruppiso, P.A., Baum, O., Reutter, W., and Hixson, D.C., "Spatio-temporal expression of two cell-CAM 105 isoforms during liver development". Cell Growth & Different, 4:257-268, 1993.
40. Lim, Y-P., Callanan, H., Lin, S-H., Thompson, N.L. & Hixson, D.C. "Preparative mini slab gel continuous elution electrophoresis: application for the isolation of proteins associated with the rat hepatocyte cell adhesion molecule, cell CAM 105". Anal. Biochem, 214:156-164, 1993.
41. Cheung, P.H., Culic, O., Qui, Y., Earley, K., Thompson, N., Hixson, D.C. and Ling, S.H. "The cytoplasmic domain of C-CAM is required for C-CAM mediated adhesion function: studies of a C-CAM transcript containing an unspliced intron". Biochem. J., 295:427-435, 1993.
42. Yang, L., Faris, R.A., and Hixson, D.C. "Characterization of a mature bile duct antigen expressed on a subpopulation of biliary ductular cells but absent from oval cells". Hepatology, 18:357-366, 1993.
43. Yang, L., Faris, R.A., and Hixson, D.C. "Phenotypic heterogeneity within clonogenic ductal cell populations isolated from normal adult rat liver". Proc Soc Exp Biol Med, 204:180-188, 1993.
44. Thompson, N.L., Lin, S-H., Panzica, M.A., Liao, W.S.L. and Hixson, D.C., "Cell CAM 105 Isoform RNA Expression is differentially regulated during rat liver regeneration and carcinogenesis". Pathobiology, 62:209-220, 1994.
45. Chester, S.J., Lim, Y-P., Vezeridis, M.P. and Hixson, D.C. "Improved detection of the early stages of colon cancer by determining both free circulating and immune complex-bound antigens reactive with monoclonal antibody". Cancer Res, 54:3974-3978, 1994.
46. Coburn, M.C., Hixson, D.C., and Reichner, J.S. "*In vitro* immune responsiveness of rats lacking active Dipeptidylpeptidase IV". Cellular Immunology, 158:269-280, 1994.
47. Baum, O., Reutter, W., Flanagan, D., Callanan, H., Lim, Y-P., and Hixson, D.C. "Anti-peptide sera against cell-CAM 105 determine high molecular-mass variants of the long isoform in rat hepatocytes". Eur. J. Biochem, 228:316-322, 1995.
48. S.-H. Lin, W. Luo, K. Earley, P. Cheung, and D. Hixson, "Structure and function of C-CAM 1: effects of the cytoplasmic domain on cell aggregation". Biochem. J., 311: 239-245, 1995.
49. Earley, K., Luo, W., Qiu, Y., Thompson, N.L., Chou, J., Hixson, D.C., and Lin, S-H. "Identification of cell-cell adhesion molecule 105 (C-CAM), C-CAM4: A secretory protein with only one Ig domain". Biochem. J., 315:799-806, 1996.
50. Reichner, J. S., Mulligan, J. A., Palla, M. E., Hixson, D. C., Albina, J. E., and Bland, K. I. Interleukin-6 production by rat hepatocellular carcinoma cells is associated with metastatic potential but not with tumorigenicity. Arch Surg, 131: 360-365, 1996.
51. Yang, D., Faris, R., Hixson, D. C., Affigne, S., and Rogler, C. "Insulin-like growth factor II blocks apoptosis of N-myc2-expressing woodchuck liver epithelial cells", J Virology. 70: 6260-6268, 1996.
52. Hixson, D.C., Faris, R.A, Affigne, S., McBride, A., "Delineation of antigenic pathways of ethionine induced liver cancer in the rat," Pathobiology, 64:79-90, 1996.
53. Chapman, L., Sang, J., Lin, S.-H., Hixson, D. C., and Thompson, N. L. "Cloning of cDNAs from a mammalian expression library by a direct selection - amplification method", Molecular Biotechnology, 5: 77-83, 1996.

55. Lim, Y-P, Fowler, L.C., Hixson, D.C., Wehbe, T., Thompson, N.L. "TuAg.1 is the liver isoform of the rat colon tumor associated antigen pE4 and a member of the immunoglobulin-like supergene family", Cancer Res. 56:3934-3940, 1996.
56. Baum, O., Troll, S., and Hixson, D., "The long and short isoform of cell-CAM 105 show variant-specific modifications in adult rat organs, Biochem. and Biophys. Res. Comm., 227:775-781, 1996.
56. Hixson, D. C., Chapman, L., McBride, A., Faris, R., and Yang, L. "Antigenic phenotypes common to rat oval cells, primary hepatocellular carcinomas and developing bile ducts", Carcinogenesis, 18:1169-1175, 1997.
57. Coleman, W.B., McCullough, K.D., Esch, G.L., Faris, R.A., Hixson, D.C., Smith, G.J., Grisham, J.W., "Evaluation of the differentiation potential of WB-F344 rat liver epithelial stem-like cell in vivo: differentiation to hepatocytes following transplantation into dipeptidylpeptidase IV-deficient rat liver". Am. J. Pathol., 151:353-359, 1997.
58. Dabeva, M.D., Hwang, S.-G., Vasa, S.R.G., Hurston, E., Novikoff, P.M., Hixson, D.C., Gupta, S., Shafritz, D.A. "Differentiation of pancreatic epithelial progenitor cells into hepatocytes following transplantation into rat liver". PNAS 94:7356-7361, 1997.
59. Makarovskiy, A., Akerley III, W., Wojcik, L., Halpert, G., Stein, B., Carreiro, M., and Hixson, D. "Application of immunomagnetic beads in combination with RT-PCR for the detection of circulating prostate cancer cells," J. Clin. Lab. Analysis. 11: 346-350, 1997.
60. Luo, W., Earley, K., Tatingco, V., Hixson, D.C., Liang, T.C., and Lin, S.-H. "Association of an 80 kDa protein with C-CAM1 cytoplasmic domain correlates with C-CAM1-mediated growth inhibition". Oncogene 16:1141-1147, 1998.
61. Makarovskiy, A. N., Yeong-Shiau, P., Piao Lo, Earley, K., Paglia, M., Hixson, D. C., and Lin, S.-W. "Expression and androgen regulation of C-CAM Cell adhesion molecule isoforms in rat dorsal and ventral prostate," Oncogene 18:3252-3260, 1999.
62. Comegys, M. M., Carreiro, M. P., Brown, J. F., Mazzacua, A., Flanagan, D. L., Makarovskiy, A., Lin, S.-H., and Hixson, D. C. "C-CAM1 expression: differential effects on morphology, differentiation state and suppression of human PC-3 prostate carcinoma cells," Oncogene, 18:3261-3276, 1999.
63. Estrera, V.T., Luo, W., Phan, D., Earley, K., Hixson, D.C., Lin, S.-H., "The cytoplasmic domain of C-CAM1 tumor suppressor is necessary and sufficient for suppressing the tumorigenicity of prostate cancer cells," Biochem. and Biophys. Res. Comm., 263:797-803, 1999.
64. Shultz, V.D., Campbell, W., Karr, S., Hixson, D.C. and Thompson, N.L. "TA1 Oncofetal rat liver cDNA and putative amino acid permease: temporal correlation with c-myc during acute CCl₄ liver injury and variation of RNA levels in response to amino acids in hepatocyte cultures," Toxicol. Appl. Pharmacol. 154:84-96, 1999.
65. Gordon GJ, Coleman WB, Hixson DC, Grisham JW. "Liver regeneration in rats with retrorsine-induced hepatocellular injury reveals the existence of a novel liver progenitor cell population," Am. J. Pathol., 156:607-619, 2000.
66. Hixson, D.C., Brown, J., McBride, A., Affigne, S.A. "Differentiation status of rat ductal cells and ethionine-induced hepatic carcinomas defined with surface-reactive monoclonal antibodies," Exper and Mole Pathol. 68:152-169, 2000.
67. Estrera, V.T., Chen, D.-T., Luo, W., Hixson, D.C., and Lin, S.-H. "Signal Transduction by the CEACAM1 Tumor Suppressor," J Biol Chem., 276: 15547-15553, 2001.
68. Makarovskiy, A. N., Siryaporn, E. Hixson, D.C., Akerley, W. "Survival of Docetaxel-resistant Prostate Cancer Cells Invitro depends on Phenotype alterations and Continuity of drug Exposure," Cell. Mole. Life Sci., 59:1198-1211, 2002.

69. Baek, Y.W., Brokat, S., Padbury, J.F., Pinar, H., Hixson, D.C., Lim, Y-P. "Inter- α Inhibitor proteins in infants and decreased levels in neonatal sepsis," J. Pediatr. 143:11-5, 2003.
70. Lim YP, Bendelja K, Opal SM, Siryaporn E, Hixson DC, Palardy JE. "Correlation between Mortality and the Levels of Inter- α Inhibitors in the Plasma of Patients with Severe Sepsis," J Infect Dis.,15;188(6):919-26. Epub 2003 Aug 26.
71. Hixson, D.C., "Animal models for assessing the contribution of stem cells to liver development, in *Stem Cell Handbook*," S. Sell, Editor, 2003, Humana Press: Towanda, NJ. P. 353-366.
72. Young, H. E., Duplaa, C., Yost, M. J., Henson, N. L., Floyd, J. A., Detmer, K., Thompson, A. J., Powell, S. W., Gamblin, T. C., Kizziah, K., Holland, B. J., Boev, A., Van De Water, J. M., Godbee, D. C., Jackson, S., Rimando, M., Edwards, C. R., Wu, E., Cawley, C., Edwards, P. D., Macgregor, A., Bozof, R., Thompson, T. M., Petro, G. J., Jr., Shelton, H. M., McCampbell, B. L., Mills, J. C., Flynt, F. L., Steele, T. A., Kearney, M., Kirincich-Greathead, A., Hardy, W., Young, P. R., Amin, A. V., Williams, R. S., Horton, M. M., McGuinn, S., Hawkins, K. C., Ericson, K., Terracio, L., Moreau, C., Hixson, D., Tobin, B. W., Hudson, J., Bowyer, F. P., 3rd, and Black, A. C., Jr. "Clonogenic analysis reveals reserve stem cells in postnatal mammals. II. Pluripotent epiblastic-like stem cells," Anat Rec 277A, 178-203, 2004.
73. Young, H. E., Duplaa, C., Romero-Ramos, M., Chesselet, M. F., Vourc'h, P., Yost, M. J., Ericson, K., Terracio, L., Asahara, T., Masuda, H., Tamura-Ninomiya, S., Detmer, K., Bray, R. A., Steele, T. A., Hixson, D., El-Kalay, M., Tobin, B. W., Russ, R. D., Horst, M. N., Floyd, J. A., Henson, N. L., Hawkins, K. C., Groom, J., Parikh, A., Blake, L., Bland, L. J., Thompson, A. J., Kirincich, A., Moreau, C., Hudson, J., Bowyer, F. P., Lin, T. J., and Black, A. C. "Adult reserve stem cells and their potential for tissue engineering," Cell Biochem Biophys 40, 1-80, 2004.
74. Britt, D. E., Yang, D. F., Yang, D. Q., Flanagan, D., Callanan, H., Lim, Y. P., Lin, S. H., and Hixson, D. C. Identification of a novel protein, LYRIC, localized to tight junctions of polarized epithelial cells. Exp Cell Res. 300: 134-148, 2004.
75. Comegys, M. M., Lin, S. H., Rand, D., Britt, D. E., Flanagan, D. L., Callanan, H. M., Brilliant, K. E., and Hixson, D. C. "Two variable regions in carcinoembryonic antigen-related cell adhesion molecule1 N-terminal domains located in or next to monoclonal antibody and adhesion epitopes show evidence of recombination in rat but not in human," J Biol Chem. 279: 35063-35078, 2004.
76. Shuh, M. and Hixson, D. C. "V(D)J recombination of chromosomally integrated, wild-type deletional and inversional substrates occur at similar frequencies with no preference for orientation," Immunol Lett. 97: 69-80, 2005.
77. Lim, Y. P., Josic, D., Callanan, H., Brown, J., and Hixson, D. C. "Affinity purification and enzymatic cleavage of inter- α inhibitor proteins using antibody and elastase immobilized on CIM monolithic disks," J Chromatogr A. 1065: 39-43, 2005
78. Josic D, Brown MK, Huang F, Callanan H, Rucevic M, Nicoletti A, et al. "Use of selective extraction and fast chromatographic separation combined with electrophoretic methods for mapping of membrane proteins," Electrophoresis. 26, 2005.
79. Laurie NA, Comegys MM, Carreiro MP, Brown JF, Flanagan DL, Brilliant KE, and Hixson DC "Carcinoembryonic antigen-related cell adhesion molecule 1a-4L suppression of rat hepatocellular carcinomas," Cancer Res. 65:11010-7, 2004.
80. Young HE, Duplaa C, Katz R, Thompson T, Hawkins KC, Boev AN, Henson NL, Heaton M, Sood R, Ashley D, Stout C, Morgan JH, 3rd, Uchakin PN, Rimando M, Long GF, Thomas C, Yoon JI, Park JE, Hunt DJ, Walsh NM, Davis JC, Lightner JE, Hutchings AM, Murphy ML, Boswell E, McAbee JA, Gray BM, Piskurich J, Blake L, Collins JA, Moreau C, Hixson D, Bowyer FP, 3rd, and Black AC, Jr. "Adult-derived stem cells and their potential for use in tissue repair and molecular medicine," J Cell Mol Med. 9:753-69, 2005.

81. Henson NL, Heaton ML, Holland BH, Hawkins KC, Rawlings BA, Eanes EA, Bozof RG, Powell SW, Grau RE, Fortney JA, Peebles BG, Kumar D, Yoon JI, Godby KN, Collins JA, Sood R, Hixson D, Bowyer FP, 3rd, Black AC, Jr., and Young HE. "Karyotypic analysis of adult pluripotent stem cells," Histol Histopathol., 20:769-84, 2005.
82. Erikson Briana M., Thompson Nancy L., Hixson Douglas C., "Tightly regulated induction of the adhesion molecule Necl-5/Cd155 during rat liver regeneration and acute liver injury," Hepatology. In Press.

ABSTRACTS:

1. Miller, M.F., P.T. Allen, J.M. Bowen, L. Dmochowski, D.C. Hixson and W.C. Williams. "Particle counting of partially purified RNA tumor viruses by a thin-sectioning technique". Proceedings of the 30th Annual Meeting of the Electron Microscopy Society of America, Los Angeles, CA., p. 293, August 14-17, 1972.
2. Hixson, D.C., M.F. Miller and L. Dmochowski. "*In situ* labeling and embedding of tissue culture cells grown on cellophane in microtiter plates". Proceedings of the 1973 Annual Meeting of the Southwest Section of the American Association for Cancer Research, Houston, Texas, p. 4, November 9-10, 1973.
3. Hixson, D.C., M.F. Miller and L. Dmochowski. "A method for embedding mammalian cells grown on cellophane in microtiter plates.". Proceedings of the Spring Meeting of the Texas Society for Electron Microscopy, Galveston, Tx. May 26-27, 1973, TSEM Newsletter 4 (2):40, 1973.
4. Hixson, D.C. "Lectin-binding studies on RNA tumor virus-infected cells". Proceedings of the 33rd Annual Meeting of the Electron Microscopy Society of America, Las Vegas, NV. pp. 326-27, August 11-15, 1975.
5. Hixson, D.C., M.F. Miller and K. Maruyama. "Comparison of lectin-binding site topography and cytoagglutination of normal and oncornavirus-infected cells". J. Cell Biol. 67:173a, 1975.
6. Hixson, D.C. and J.M. Bowen. "A micromethod for performing ferritin labeling studies of mouse mammary tumor Comegys, M. M., Lin, S-H., Earley, K., Callanan, H., Flanagan, D., Britt, D., Jungbauer, A., and Hixson, D.C., Monoclonal antibody defined epitopes in the C-CAM 1 N-terminal Ig-V like domain are expressed on C-CAM 2 in a cell-typed dependent manner. Under revision 2000.
7. Hixson, D.C., J.M. Bowen, M.Scanlon, M.Nash and L. Dmochowski. "Possible strain related variations in mouse mammary tumor virus envelope glycoproteins as detected by ferritin conjugated wheat germ lectin". Proceedings of the 34th Annual Meeting of the Electron Microscopy Society of America, Miami, Fl., pp. 254-55, August 9-13, 1976.
8. Chan, J.C., D.C. Hixson, C. Mallett, M.L. Malsky and J.M. Bowen. "Interaction between murine RNA tumor viruses and vesicular stomatitis virus (VSV)". Proceedings of the Southwest Section of the American Association for Cancer Research, Galveston, Tx. December 1976.
9. Chan, J.C., M.L. Malsky, D.C. Hixson and J.M. Bowen. "Phenotypic mixing between vesicular stomatitis virus and murine Type-C or Type-B viruses". Proceedings of the 76th Annual Meeting of the American Society for Microbiology, Atlantic City, N.J., pp 222, 1976.
10. Chan, J.C., M. Scanlon, D.C. Hixson, J.E. Knesek and J. M. Bowen. "Type-C RNA tumor virus production by a spontaneously transformed Wistar rat cell (WRC) culture". Proceedings of the 1977 Annual American Society for Microbiology, New Orleans, LA, May 3-8, 1977.
11. Chan, J.C., D.C. Hixson and J.M. Bowen. "Interaction between murine RNA tumor viruses and vesicular stomatitis virus (VSV)". Proc. Am. Assoc. Cancer Res. 79:400a, 1978.
12. Glenney, J.R., Jr., D.C. Hixson and E.F. Walborg, Jr., "Cytoskeletal involvement in the concanavalin A-induced agglutination of Novikoff ascites hepatoma cells". J. Cell Biol. 75:250a, 1977.

13. Neri, G., D. Seminara, E.M. Davis, D.C. Hixson and E.F. Walborg, Jr. "Use of lectins to probe the structure and accessibility of heterosaccharides present at the surfaced of Novikoff hepatoma cells". Proceedings of the 4th International Symposium on Glycoconjugates, Woods Hole, MA, September 26-October 1, 1977.
14. Hixson, D.C., J.C. Chan, J.M. Bowen and E.F. Walborg, Jr. "Biological and surface properties of C-type virus particles produced by Novikoff ascites hepatoma cells". Proceedings of the 35th Annual Meeting of the Electron Microscopy Society of America, Boston, MA, pp. 388-89, August 22-27, 1977.
15. Hixson, D.C., J.C. Chan, J.E. Knesek, M.F. Miller and J.M. Bowen. "Pseudotype formation between vesicular stomatitis virus and mouse mammary tumor virus as detected by immunoelectron microscopy". J. Cell Biology 79:403a, 1978.
16. Chan, J.C., M.D. Mohr, J.M. Bowen, J.L. East and D.C. Hixson. "Interaction between vesicular stomatitis virus (VSV) and murine retrovirus". J. Cell Biol. 79:400a, 1978.
17. Hixson, D.C., J.Chesner and E.F. Walborg, Jr. "Isolation of a three-dimensional biomatrix from rat liver". J. Cell Biol. 87:121a, 1980.
18. Hixson, D.C., J.M. Yep, J.Chesner, J.P. Allison and E.F. Walborg, Jr. "Characterization of the envelope glycoprotein from Type-C retrovirus produced by a transplantable rat tumor". Proceedings of the 72nd Annual Meeting of the American Association for Cancer Research, Washington, D.C. April 26-28, 1981.
19. Hixson, D.C., J.P. Allison, L.L. Ridge, M.W. Thomas and E.F. Walborg, Jr., "Structural variation of a plasma membrane glycoprotein of normal and malignant rat liver cells". Proceedings of the 182nd Annual Meeting of the American Chemical Society, New York, NY, August 23-28, 1981.
20. Allison, J.P., D.C. Hixson, J.N. Lund, J.E. Chesner, L.L. Ridge, M.J. Leger, K.D. McEntire and E.F. Walborg, Jr. "Monoclonal antibodies as probes of surface antigenic alteration during experimental hepatocarcinogenesis in the rat". International Workshop on Membranes in Tumor Growth, Rome, Italy, June 14-18, 1982.
21. Hixson, D.C., J.P.,Allison, J.E. Chesner, M.J. Leger, L.L. Ridge, M.W. Thomas and E.F. Walborg, Jr. "Variations in the expression and structure of a subset of normal bile canalicular glycoproteins on transplantable hepatocellular carcinomas". International Workshop on Membranes in Tumor Growth, Rome, Italy, June 14-18, 1982.
22. Hixson, D.C., M.L. Ponce, K.D. McEntire, J.E. Chesner, J.N. Lung, J.P. Allison and E.F. Walborg, Jr. "Identification of a rat liver glycoprotein which is present on both hepatocytes and extracellular biomatrix". Basel Liver Week 1982, Structural Carbohydrates in the Liver, Basel, Switzerland, October 12-18, 1982.
23. Hixson, D.C., J.P. Allison, K.D. McEntire and E.F. Walborg, Jr. "Characterization of retrovirus associated cell-surface antigens on Novikoff hepatocellular carcinoma and transformed Wistar rat embryo cells". In: Structural Carbohydrates in the Liver, H. Popper et al, eds., p. 642, 1982.
24. Hixson, D.C., J.P. Allison, E.F. Walborg, Jr. "Immunocytochemical analysis of rat leukemia viruses". Fed. Proc. 42(4):2833, 1983.
25. Allison, J.P. and D.C. Hixson. "Monoclonal antibodies as probes of surface alterations associated with hepatocarcinogenesis in the rat". Fed. proc. 42(5):1178, 1983.
26. Allison, J.P. and D.C. Hixson. "Monoclonal antibodies as probes of surface alterations associated with hepatocarcinogenesis in the rat". Proc. Am. Assoc. Cancer Res. 24:217, 1983.
27. Hixson, D.C., K. Donahue, K.D. McEntire, and J. E. Chesner. "Detection of alterations in adhesive interactions during hepatocarcinogenesis using monoclonal antibodies against rat liver desmosomes". J. Cell Biol. 97:85a, 1983.
28. McEntire, K.M., D.C. Hixson, L.L. Ridge, J.E. Chesner and J.P. Allison. "Suppression of immunodominant molecules with hyperimmune serum". First Texas Immunology Conference, Galveston, Tx., November, 1983.

29. Tsuchida, S., D.C. Hixson and E.F. Walborg, Jr. "Identification of a glutamyltransferase-related antigen in a rat hepatocellular carcinoma exhibiting low activity for this enzyme". *Proc. Am. Assoc. Cancer Res.* 25:3, 1984.
30. Pelling, J.D., D.C. Hixson, R.S. Nairn and R.J. Slaga. "Altered gene expression during two-stage tumorigenesis in Sencar mouse skin". *Proc. Amer. Assoc. Cancer Res.* 25:78, 1984.
31. Tsuchida, S., D.C. Hixson, J.P. Allison, Jr. "Charge heterogeneity of dipeptidyl peptidase IV (DPP IV) from rat liver, kidney and hepatocellular carcinoma". *Fed. Proc.* 43:1950, 1984.
32. Hixson, D.C., K. McEntire, J. Chesner and J.P. Allison. "Production of monoclonal antibodies defining oval cells". *Fed. Proc.* 43:1420, 1984.
33. Hixson, D.C., K.D. McEntire and B. Obrink. "Altered expression of cell adhesion molecules on transplantable rat hepatocellular carcinomas". *J. Cell Biol.* 99:164a, 1984.
34. McEntire, K.D. and D.C. Hixson. "Cryptic expression of cell-CAM 105 by transplantable hepatocellular carcinomas". *J. Cell Biol.* 99:165a, 1984.
35. McEntire, K.D., J. Mowery, J.E. Chesner and D.C. Hixson. "Expression of a structurally altered cell adhesion molecule by transplantable hepatocellular carcinomas cells". 13th Annual gulf Coast Molecular Biology Conference, October 19-20, Smithville, Tx., 1984.
36. Tsuchida, S., D.C. Hixson, J.P. Allison and E.F. Walborg, Jr. "Charge heterogeneity of dipeptidyl peptidase IV (DPP IV) from rat liver, kidney and a hepatocellular carcinoma". *Fed. Proc.* 43:1950, 1984.
37. Mowery, J., C. Carter and D.C. Hixson. "Microassay for measuring antibody-mediated adhesion of lateral contact formation between rat hepatocytes". *Fed. Proc.* 44:1437, 1985.
38. Hixson, D.C. and K.D. McEntire. "Detection using monoclonal antibodies of an altered form of cell-CAM 105 on hepatocellular carcinomas". *Fed. Proc.* 44:1430, 1985.
39. Faris, R., J.P. Allison and D.C. Hixson. "Phenotypic characterization of allogeneically transplanted oval cells". *Proc. Am. Assoc. Cancer Res.* 26:135, 1985.
40. Pelling, J.C., G. Patskan, D.C. Hixson, R.S. Nairn and T.J. Slaga. "Oncogene Expression at various stages of tumorigenesis in Sencar mice treated with optical enantiomers of benzo(a)pyrene-7,8-diol-9,10-epoxide". *Proc. Am. Assoc. Cancer Res.* 26:135, 1985.
41. Faris, R., K. Wedig and D.C. Hixson. "Detection of antigenic subpopulations in regenerating rat liver using monoclonal antibodies". *J. Cell Biol.* 101:483a, 1985.
42. Mowery, J., K.D. McEntire and D.C. Hixson. "Localization of cell-CAM 105 to specialized junctions". *J. Cell Biol.* 101:304a, 1985.
43. Faris, R.A., J.P. Allison and D.C. Hixson. "Phenotypic Differences in Hepatic Nodules (HN) Induced by the Resistant Hepatocyte and Ethionine Model Systems in the Rat". *Proc. Am. Assoc. Cancer Res.* 27:96, 1986.
44. Hixson, D.C., K.D. McEntire, J. Chesner, R. Faris, J. Weltman and N. Marceau. "Monoclonal Antibody (MAb) Recognizing a Glycoprotein Absent from Normal Tissues but Present on Transplantable and Primary (PHC) Hepatocellular Carcinomas Induced by Azo Dye". *Proc. Am. Assoc. Cancer Res.* 27:365, 1986.
45. Faris, R.A., Monfils, B.A., Hixson, D.C. "Expression of oval cell associated antigens by normal pancreatic acinar and ductal cells." *J. Cell Biology* 103: 360a, 1986.
46. Hixson, D.C., McEntire, D.C. "Structural characteristics of cell-CAM 105 expressed by normal and malignant hepatocytes." *J. Cell Biology* 103:464a, 1986.

47. Allison, J.P., Ajami, S., DeGraffenreid, L., Faris, R.A., Hixson, D.C. "Identification of transferrin receptor as a hepatoma-associated antigen." *Proc. Am. Assoc. Cancer Res.* 27:99, 1986.
48. Mowery, J., Hixson, D.C. "Localization of cell-CAM 105 to bile canaliculi and adjacent lateral membranes." *Federation Proc.* 46:1314, 1986.
49. Faris, R.A., Monfils, B.A., Hixson, D.C. "Antigenic phenotypes of ethionine induced primary hepatocellular carcinomas (PHC) and metastatic foci (MF)." *Proc. Am. Assoc. Cancer Res.* 38:107, 1986.
50. Bodenheimer, H.C., Jr., Faris, R.A., Hixson, D.C., and Charland C. "Monoclonal Antibody Reactive with Rat Kupffer Cells." *American Association for the Study of Liver Diseases*, Chicago, Illinois, October, 1987.
51. Faris, R.A., Monfils, B.S., and Hixson, D.C. "Phenotype of ectopically-transplanted normal hepatocytes in rat pancreas." *J. Cell Biol.* 105:273a, 1987.
52. Faris, R.A. and Hixson, D.C. "Expression of tumor-associated antigens (TAA) by a subpopulation of hepatic nodules (HN) induced by the Solt/Farber (S/F) protocol". *Proc. Amer. Assoc. Cancer Research*, 29:141a, 1988.
53. Mowery, J. and Hixson, D.C.: "Effect of DMSO on Expression and Localization of Domain Specific Hepatocyte Surface Proteins *In Vitro*." *J. Cell. Biol.*, 107:784a, 1988.
54. Piazza, G.A., Callanan, H.M., and Hixson, D.C.: "Proteolysis of fibronectin by rat hepatocyte dipeptidylpeptidase IV (DPP IV) by endoprotease cleavage". *Cell Biology*, P3.6.17, 1988.
55. Piazza, G.A., Callanan, H.M., and Hixson, D.C.: "Fibronectin (FN) is a Proteolytic Substrate of Rat Hepatocyte Dipeptidylpeptidase IV (DPP IV)". *The FASEB Journal*, 2:8633a, 1988.
56. Faris, R.A., Monfils, B.A., and Hixson, D.C.: "Antigenic Relationship Between Oval Cells, Fetal Hepatocytes, and Myelocytic Precursor Cells". *Proc. Amer. Assoc. Cancer Research*, 30:52, 1989.
57. Piazza, G.A., Callanan, H., Mowery, J., and Hixson, D.C.: "Evidence for a role of dipeptidylpeptidase IV (DPP IV) in fibronectin (FN)-mediated hepatocyte-matrix interactions". *Proc. Amer. Assoc. Cancer Res.*, 30:15, 1989.
58. Novikoff, P.M., Hixson, D.C., Yam, A. "Liver cell interrelations in early stages of rat hepatocellular hepatocarcinogenesis." *J. Cell Biol.* 109:1830a, 1989.
59. Thompson, N.L., Callanan, H., Panzica, M.A., Flannagan, D., Hong, W., Hartel-Schenk, S., Faris, R.A. and Hixson, D.C.: "Molecular mechanism for the absence of dipeptidyl peptidase IV activity in a substrain of Fischer 344 rats", *Federation Proc.* 4:1034a, 1990
60. Thompson, N.L., Hull, G., Lin, S., and Hixson, D.C. "Cell CAM 105 RNA expression during rat liver development, regeneration and carcinogenesis". *J. Cell Biol.* 111:156a, 1990 meeting.
61. Lim, Y.P., Tai, J.H., Josic, D., Callanan, H., Reutter, W., Hixson, D.C. "Association between the rat hepatocyte cell adhesion molecule, cell-CAM 105 and a 65/67 kD calcium binding protein". *J. Cell Biol.* 111:355a, 1990.
62. Lin, S.H., Flanagan, D., Culic, O., Hixson, D.C. "A rat liver ectoATPase is identical to the hepatocyte adhesion molecule, cell-CAM 105 and is a member of the Ig supergene family". *J. Cell Biol.* 111:156a, 1990.
63. Lim, Y.P., Chest, S.J., Maimonis, P., Brown, J., Mazerin, G., Affigne, S., and Hixson, D.C. "Generation of monoclonal antibodies against antigens responsible for the early detection of human colon cancer", *Proc. Amer. Asso. Cancer Res.* 33:203, 1992.
64. Yang, L., Faris, R.A., McBride, A., and Hixson, D.C., "Maintenance of bile duct antigenic heterogeneity in long term cultures of bile duct epithelial cells", *J. Cell Biol.*, 115(3), 357a, 1991.

65. Yang, L., Faris, R.A., Dunsford, H.A., and Hixson, D.C., "Monoclonal antibody (MAb) defined antigen expressed by a subpopulation of biliary ductular cells (BDC) but absent from most oval cells". *Proc. Amer. Assoc. Cancer Res.*, 32:33, 1991.
66. Thompson, N.L., Sang, J., Lim, Y-P., and Hixson, D.C., "Cloning of a rat liver tumor associated antigen by method combining direct antibody selection and PCR amplification with microsequencing", *Amer. Assoc. Cancer Res.* 33:193, March 1992.
67. Yang, L., Faris, R.A., and Hixson, D.C., "Phenotypic heterogeneity within clonogenic ductal cell populations isolated from normal adult rat liver". *Proc. Soc. Exper. Biol. Med.*, In Press, 1993.
68. Thompson, N.L., Lin, S.H., Panzica, M.A. and Hixson, D.C. "Contrasting regulation of cell CAM 105 isoforms in three rat liver models". Accepted, Fourth Annual CEA/PSG Workshop, Boston, MA, Aug. 22-25, 1993.
69. Lim, Y.P., Callanan, H., Lin, S-H., and Hixson, D.C. "Identification of membrane associated proteins forming stable complexes with the rat hepatocyte cell adhesion molecule, cell-CAM 105". Thirty Third Annual Meeting, American Society for Cell Biology, December 11-15, 1993, New Orleans, LA.
70. Comegys, M., Lin, S-W., Thompson, N.L., and Hixson, D.C. "Cell type specific O-glycosylation of C-CAM isoforms". *Experimental Biology*, April 24-28, 1994, Anaheim, California.
71. Lim, Y.-P., Callanan, H., and Hixson, D. C. Characterization of p80, a C-CAM 105 co-precipitated protein. *In: Sixth Annual CEA/PSG Workshop*, Montreal Canada, 1995.
72. Comegys, M., Lin, S.-W., Thompson, N. L., and Hixson, D. C. Rat strain and cell-type specific expression of C-CAM 2. *In: FASEB J.*, Atlanta, Georgia, 1995, pp. A1.(1-7)
73. Halpert, G., Makarovskiy, A., Stein, B.S. and Hixson, D.C. "Development of normal and SV40-large T immortalized dorsal-lateral rat prostate cell lines. 87th Annual AACR, April 1996.
74. Makarovskiy, A., Halpert, G., Stein, B., and Hixson, D.C. "Detection of circulating tumor cells in patients with metastatic disease. 87th Annual AACR, April, 1996.
75. Lim, YP, Fowler, L., Wehbe, T., Thompson, N. L., Hixson, D.C. "Identify of TuAg.I, a rat liver oncofetal antigen with pE4, a member of the immunoglobulin gene superfamily and evidence for expression in human carcinomas." 87th Annual AACR, April, 1996.
76. Chapman, L., McBride, A., Faris, R., Yang, L., and Hixson, D. C. "Rat oval cells express antigenic phenotypes identified in primary hepatocellular carcinomas and in developing bile ducts." *In: ASBMB/ASIP/AAI Joint Meeting*, New Orleans, 1996.
77. Carreiro, M., Comegys, M., Brown, J., Flanagan, D., Lin, S.-H., Stein, B. S., and Hixson, D. C. "Morphological changes associated with tumor suppression by C-CAM 1." *In: ASBMB/ASIP/AAI Joint Meeting*, New Orleans, 1996
78. Makarovskiy, A., Carreiro, M., Brown, J., Lim, Y.-P., Thompson, N., Stein, B., and Hixson, D. C. "Novel immunization strategy identifies minor epitopes on human prostate cells." *In: 1997 NEACR Meeting*, Providence, 1997.
79. Makarovskiy, A., Carreiro, M., Paglia, M., Stein, B., and Hixson, D. C. "Phenotype characterization and immunoisolation of rat prostate epithelial cells differentially expressing monoclonal antibody defined markers in situ and in vitro." *In: 1998 AACR* 1998.
80. Thompson, N., Schultz, V., Campbell, W., Hixson, D., and Karr, S. "Expression of TA1, an amino acid transport homolog, correlates with c-MYC during CC14 induced liver regeneration and amino acid deprivation in cultured hepatocytes." *In: Experimental Biology '98*, San Francisco, April 18-22 1998.

81. Britt, D., McBride, A., Yang, D. F., Lim, Y.-P., and Hixson, D. C. "Cloning of Oval Cell Antigens expressed during liver development and carcinogenesis." *In: Experimental Biology '98, San Francisco, April 18-22 1998.*
82. Hixson, D. C., Lui, L., Karr, S., and Thompson, N. L. "Elevated Expression of TuAg1, an Ig-like oncofetal Antigen, occurs transiently in fetal, regenerating, and CC14 injured liver and during oval cell expression and tumor progression." *In: Experimental Biology '98, San Francisco, April 18-22 1998.*
83. Chapman, L., McBride, A., Gupta, N., Vijayaraghavan, M., Osmena, C., Irshad, N., Taing, S., Berry, D., and Hixson, D. "A biliary transplantation model to test the differentiation potential of rat liver epithelial cells." *In: ASIP Experimental Biology '98, San Francisco, April 18-22 1998.*
84. Chapman, L. Coleman, W. and Hixson, D., "Intergration, Survival and Differentiation of Liver Epithelial Cells in Hepatic and Pancreatic Ducts," *Experimental Biology '99, Washington, D.C. April 17-21, 1999.*
85. Gordon, GJ, Coleman, WB, Hixson, DC and Grisham, JW, "Cellular responses during liver regeneration after partial hepatectomy in rats with retrorsine-induced hepatocellular injury," *Experimental Biology '99, Washington DC, April 17-21, 1999.*
86. Britt, D., Yang, D., Flanagan, D., Lin, S.-H., Lim, Y.-P., and Hixson, D. C. "Cloning and initial characterization of p80, a novel associated protein with elevated expression in tumors." *In: ASIP, Experimental Biology '99, Washington, DC, April 17-21 1999.*
87. Britt, D., Yang, D.F., Flanagan, D., Carriero, M., Lim, Y.-P., and Hixson, D.C., "Characterization of a novel protein, p70/B31, and its role in CEACAM-mediated tumor suppression in rat hepatocellular carcinoma," *Experimental Biology 2000, San Diego, CA, April 15-18, 2000.*
88. Laurie, N. A., Brown, J., Carreiro, M., Comegys, M., and Hixson, D. C., "The Effects of CEACAM1 On the Cytoskeletal Organization of Prostate Cancer Cells Pathology and Laboratory Medicine," *Experimental Biology 2002, New Orleans, LA, April 20-24, 2002.*
89. Simper, R. K., Brown, J., Callanan, H., Carreiro, M., Flanagan, D., McBride, A., and Hixson D.C. "Defining the Surface Phenotypes of fetal Ductal Cells with Stem-like Properties," *Experimental Biology 2002, New Orleans, LA, April 20-24, 2002.*
90. R.A. Rozich, M. Carreiro, T. Frenkl and D.C. Hixson, "Loss of BD.1 inducibility during the cell cycle may signal an early event in the neoplastic process," *Experimental Biology 2003, San Diego CA., April 11-15th, 2003,*
91. D.E. Britt, D.L. Flanagan, D. Yang and D.C. Hixson. "Cloning of the rat oval cell/bile duct antigen OC.2." *Experimental Biology 2003, San Diego CA., April 11-15th, 2003.*
92. D.E. Britt, D. Yang, D. Yang, D.L. Flanagan and D.C. Hixson. "Expression of a novel protein, LYRIC, in prostate tumor development," *Experimental Biology 2003, San Diego CA., April 11-15th, 2003.*
93. M.D. Haskell, D.L. Flanagan, K.E. Brilliant and D.C. Hixson, "Investigation of the function of cell surface heat shock cognate 70 on bile duct epithelial cells," *Experimental Biology 2003, San Diego CA., April 11-15th, 2003.*
94. N.A. Laurie and D. Hixson, "The effects of CEACAM1 on the growth and desmosomal organization of prostate and liver cancer cells," *Experimental Biology 2003, San Diego CA., April 11-15th, 2003.*
95. E. Lawson, N. Laurie, D. Britt and D.C. Hixson, "The effects of CEACAM1b-4S on Tumorigenicity," *COBRE CCRD Annual Research Symposium, Providence, RI, July 31, 2003.*
96. E. Lawson, N. Laurie, H. Callanan, D. Britt and D.C. Hixson, "The effects of CEACAM1b-4S on Tumorigenicity," *54th Annual Meeting of the AASLD, Boston, MA, October 24th-28th, 2003.*
97. B. Erickson, N. Thompson, Y. Lim and D. Hixson, "TuAg1/TagE4 Functions as an Emergency Cell Adhesion Molecule in Liver Injury and Carcinogenesis," *Experimental Biology 2004, Washington, DC, April 17-21st, 2004.*

98. R. A. Rozich, M. A. Carreiro, T. A. Frenkl, A. A. Sirica and D. C. Hixson, "An Early Event In Spontaneous Transformation Is Defined By Loss Of BD.1, A Novel Marker, During The Cell Cycle," Experimental Biology 2004, Washington, DC, April 17-21st, 2004.
99. S. C. Ash, D. F. Yang, D. C. Yang, D. C. Hixson and D. C. Britt, "Examining the Role of LYRIC, a Novel Tight Junction Associated Protein, in Tumor Development," Experimental Biology 2004, Washington, DC, April 17-21st, 2004.
100. Lai, G.-H., Rozich R.A., Hixson, D.C., and Sirica, A.E. "Oncogenic neu transformation of rat cholangiocytes: A novel *in vitro* model of cholangiocarcinogenesis," Proc. Amer. Assoc. Cancer Res., 45: 1272, 2004.

Books/Chapters:

1. Maruyama, K., M.F. Miller, D.C. Hixson and S.H. Wagner. "Surface properties of C-type virus-infected cells". In: Cellular Membranes and Tumor Cell Behavior, (28th Annual Symposium on Fundamental Cancer Research), Williams and Wilkins, Baltimore, Maryland, 1975, pp. 421-446.
2. Neri, F., M. Giuliano, D.C. Hixson and E.F. Walborg, Jr. "The role of cell surface sialic acid in lectin-induced agglutination of Novikoff hepatoma cells". In: Membranes and Disease, (L. Bolis, J. Hoffman and A. Leaf, eds.), Raven Press, New York, N.Y., 1976, pp. 163-172.
3. Starling, J.J., D.C. Hixson, S.C. Capetillo, E.M. Davis, G. Neri and E.F. Walborg, Jr. "Cell-surface glycoproteins of normal and malignant rat liver cells". In: Glycoproteins and glycolipids in Disease Processes, (E.F. Walborg, Jr., ed.), Am. Chem. Soc. Symposia Series 80, 1978, pp. 412-431.
4. Walborg, E.F. , Jr., J.J. Starling, E.M. Davis, D.C. Hixson and J.P. Allison. "Plasma membrane alterations during carcinogenesis". In: Carcinogens: Identification and Mechanisms of Action, (A.C. Griffin and C. R. Shaw, eds.), Raven Press, New York, 1979, p. 381.
5. Hixson, D.C., J.P. Allison, J.E. Chesner, M.J. Leger, L.L. Ridge, M.W. Thomas and E.F. Walborg, Jr. "Variations in the expression and structure of a subset of normal bile canalicular glycoproteins on transplantable hepatocellular carcinomas". In: Membranes in Tumour Growth, (T. Galeotti, A.Cittidini, G. Neri and S. Papa, eds), Elsevier Biomedical Press, Amsterdam, pp. 19-27, 1982.
6. Allison, J. P., D.C. Hixson, J.N. Lund, J. E. Chesner, L.L. Ridge, M.J. Leger, K.D. McEntire and E.F. Walborg, Jr. "Monoclonal antibodies as probes of surface antigenic alteration during experimental carcinogenesis in the rat". In: Membranes in Tumour Growth, (T. Galeotti, A. Cittidini, G. Neri and S. Papa, eds.), Elsevier Biomedical Press, Amsterdam, pp. 599-606, 1982.
7. Hixson, D.C., M.D. Ponce, K.D. McEntire, J.E. Chesner, J.N. Lund, J. P. Allison and E.F. Walborg, Jr. "Identification of a rat liver glycoprotein which is present on both hepatocytes and extracellular biomatrix", In: Structural Carbohydrates in the Liver, (H. Poper et al, ed.), MTP Press Limited, Lancaster, England, pp. 577-585, 1983.
8. Walborg, E.F. , Jr., S. Tsuchida, J. P. Allison, M. Ponce, A.Barrick, D.S. Weeden, M.W. Thomas and D.C. Hixson. "Dipeptidyl peptidase IV, an enzyme shared by the hepatocyte plasma membrane and liver biomatrix: altered expression in hepatocellular carcinomas", In: Membranes in Tumour Growth, (Elsevier Biomedical Press, Amsterdam, 1985.)
9. Hixson, D.C. and K.D. McEntire. "Detection Using Monoclonal Antibodies of a Structurally Altered Form of Cell-Cam 105 on Rat Hepatocellular Carcinomas", In: Molecular Determinants of Animal Form, (G. Edelman, ed.), Alan R. Liss Inc., New York, pp. 253-270, 1985.

10. Pelling, J.D., Ernst S., Patskan, G., Rhode, S., Nairn, R., Hixson, D.C., Slaga, T.S. "Altered Expression of Oncogenes in Mouse Epidermis Following Exposure to Benzo (a) Pyrene Diol Epoxide Enantiomers", In: Biological Reactive Intermediates, Vol. 3, (R. Synder, ed.) Plenum Press, NY, 1986.
11. Hixson, D.C., Faris, R.A., Yang, L., and Novikoff, P., "Antigenic clues to liver development, renewal and Carcinogenesis: An Integrated Model", In: The Role of Cell Types in Hepatocarcinogenesis, CRC Press N.Y., 1992.
12. Hixson, D.C., and Fowler Lizeth, C., "Development and Phenotypic heterogeneity of intrahepatic biliary epithelial cells", In: Biliary and Pancreatic Ductal Epithelia: Pathobiology and Pathophysiology, Marcel Dekker, Inc., NY, 1997.
13. Hixson, D.C., "Animal models for assessing the contribution of stem cells to liver development," In: Stem Cell Handbook, (S. Sell, ed) Humana Press, Towanda, NJ. pp 353-366, 2003.

PATENTS AND INVENTIONS:

Sang, J., Lim, Y-P., Hixson, D.C., and Thompson, N.L., Expression Cloning Method., Application for United States Patent Serial No. 07/749,545, Filed: August 26, 1991.

Lim, Y-P. and Hixson, D.C. Disposable mini-slab gel for preparative electrophoresis, approved, USSN 07/899, 460.

INVITED LECTURES & SEMINARS:

LOCAL

- 1985** "Detection of Molecular and Cellular Alterations During Hepatocarcinogenesis using Monoclonal Antibodies", Brown University Medical School, Rhode Island Hospital, Providence, RI
- 1986** "Molecular Biology of Cancer", Brown University, Providence Rhode Island
- 1988** "Altered expression of adhesion molecules during hepatocarcinogenesis", Brown University, Providence, RI
- 1989** "Fetal, oval, ductal or none of the above: antigenic clues to the multiple choice of liver development", Gordon Conference on Cancer and Differentiation, Newport, R.I.
- 1991** "Role of Hepatocyte cell adhesion in interactions of normal & malignant hepatocytes," Brown University Pathobiology program.
- 1992** "Cellular and molecular alteration during hepatocarcinogenesis in the rat", Brown University MCB Program, Providence, R.I.
- 1993** "Cellular Interactions in Hepatocarcinogenesis", Brown University Pathobiology Program.
"Stem cells, CAMs and Liver Carcinogenesis", Brown University MCB Program.
- 1995** "CopyCat Killers", Brown University Friday Night Club.
- 1996** "Molecular Markers for Early Events during Carcinogenesis", Hematology and Oncology Fellows Conference.
- 1997** "Tumor Suppression by C-CAM 1, an Ig-like Cell Adhesion Molecule", University of Rhode Island Seminar
- 1998** "Hepatic Stem Cells", Grand Rounds, Department of Pathology, Brown University
- 1999** "CEA CAM, an Ig-Like Cell Adhesion Molecule" IEP, Brown University, Providence, R.I.

- 1999** "Stem-Cells and IG-Like Tumor Suppressors: The Beginning and End of Liver Carcinogenesis", MCB Program, Brown University.
- 2003** "Bipotent ductal cells – Are they progenitors of HCC?", Bio 284, Cell Adhesion and Disease, Brown University.

NATIONAL

- 1976** "Interaction of Lectins with RNA Tumor Virus Infected Cells", Virology Dept., MDAH
 "Interaction of Lectins with RNA Tumor Virus Infected Cells and Their Associated Viruses", Loyola Medical School, Dept. of Anatomy, Chicago, IL, and Uni. of Michigan Med. School, Dept. of Biochemistry, Ann Arbor, MI
- 1977** "Use of Lectins as Biochemical Probes for Analyzing Carbohydrate Containing Macromolecules of Muring RNA Tumor Virus", Biochemistry Dept., MDAH
- 1981** "Characterization of the Envelope Glycoprotein from Type C Retrovirus Produced by a Transplantable Rat Tumor", Science Park-Research Division, Smithville, Texas
 "Characterization of Envelope Glycoproteins from Three Different RaLV Isolates, Dept. of Biology, MDAH
- 1982** "Changes in Bile Canalicular Glycoproteins in Hepatocellular Carcinomas", Baylor College of Medicine, Houston, Texas
- 1983** "Identification of a Rat Liver Glycoprotein Which is Present on Both Hepatocytes and Extracellular Biomatrix", Biochemistry Dept., MDAH
 "Monoclonal Antibodies as Probes of Alterations in Histotypic Interactions During Hepatocarcinogenesis", Biology Dept., Texas A & M University, College Station, Texas
- 1984** "Analysis Using Monoclonal Antibodies of Phenotypic Alterations During Hepatocarcinogenesis, Environmental Protection Agency, Cincinnati, Ohio
- 1985** "Alterations in Adhesive Interactions During Hepatocarcinogenesis", Eppley Institute for Research in Cancer and Allied Diseases, Omaha, Nebraska
 "Molecular Alterations in Adhesion During Hepatocarcinogenesis", Workshop: "Structure of Adhesion Molecules, Receptors and Cell Junction Molecules" at the UCLA Symposium "Molecular Determinants of Animal Form", Park City, Utah
- 1986** "Immunocytochemical detection with monoclonal antibodies of antigenic subpopulations arising during hepatocarcinogenesis", Hepatic Stem Cell Conference, NIH, Bethesda, MD
- 1987** "Antigenically fingerprinting the hepatic sociopath", Albert Einstein College of Medicine, Bronx, NY
- 1988** "Mechanism of progression in liver carcinogenesis", FASEB Summer Conference, Copper Mountain, CO
- 1989** "Retention of polarity in primary Hepatocyte cultures: Effects of DMSO", Symposium & Workshop on the Pathobiology of Neoplasia, Richmond, VA
- 1990** "Two new antigenic markers and a novel transplantation model for tracing cell lineages during hepatocarcinogenesis." FASEB Summer Conference on Hepatic Regeneration and Carcinogenesis: Molecular and Cellular Pathways, Copper Mountain, CO.

- "Molecular and cellular alterations during hepato-carcinogenesis; analysis with monoclonal antibodies." Dept. of Molecular Pathology, M.D. Anderson Hospital and Tumor Institute, Houston, TX.
- "Altered Expression of Cell Adhesion Proteins During Liver Regeneration and Hepatic Carcinogenesis." Albert Einstein College of Medicine, Bronx, NY.
- 1993** "Phenotypic Heterogeneity within clonogenic cell populations isolated from normal adult rat liver," Experimental Biology Meeting, (FASEB) New Orleans, Louisiana.
- "Ductal cell populations isolated from normal adult rat liver", University of Texas M.D. Anderson Cancer Center, Science Park-Research Division, Smithville, TX.
- 1995** "Molecular markers for early events during carcinogenesis in liver and colon", Ohio State University's Molecular Carcinogenesis and Environmental Health Seminar Series, Columbus, Ohio.
- 1996** "Antigenic Phenotypes Common to Oval Cells and Hepatocellular Carcinoma", Laboratory of Experimental Carcinogenesis, NIH
- 1997** "C-CAM, an IG-like Cell Adhesion Molecule with tumor Suppressor Activity", University of Virginia, VA
- 1997** "Hepatic Stem Cells: Do They Follow the Rules", Tenth Annual Meeting on Hepatic Stem Cells, NIH Bethesda, MD
- 1998** "Integration, Survival and Differentiation of Liver epithelial cells in Hepatic and Pancreatic ducts", Annual Meeting of Experimental Biology, San Francisco, CA
- 1998** "Elevated Expression of TuAg.1, An Ig-Like Oncofetal Antigen, Occurs Transiently in Fetal, Regenerating, and CC14 Injured Liver and During Oval Cell Expansion and Tumor Progression", Mini-symposium, Annual Meeting of Experimental Biology, San Francisco, CA
- 1998** "The ins and outs of C-CAM, an IG-like Cell Adhesion Molecule with tumor Suppressor Activity", Science Park Research Division, Houston, TX.
- 1998** "Hepatic Stem Cells meeting, C-CAM an IG-like multifunctional cell adhesion molecule with growth regulating and signal transducing activity, 11th Annual Hepatic Stem Cell meeting, NIH Bethesda MD.
- 1999** "Effect of DAPM on Oval Cell Activation by AAF/PH", 12th Annual Hepatic Stem Cell meeting, Bethesda, Maryland.
- 2000** "Monoclonal Antibodies against surface antigens epitopes expressed during rat liver development and carcinogenesis", Experimental Biology 2000 Workshop on Liver Pathology; Stem Cells, San Diego, CA.
- 2001** "Hepatic Stem Cells: An older, wiser, and Bush-free alternative to embryonic stem cells" Science Park research Division of the University of Texas M.D. Anderson Cancer Center.
- 2001** "Stages in Hepatic Ductal Cell Development Defined by Surface Reactive Monoclonal Antibodies" Liver Research Center Seminars, Albert Einstein College of Medicine, Bronx, N.Y.
- 2004** "Bipotent fetal liver progenitors expressing ductal markers", Seminar at Virginia Commonwealth University, Richmond Virginia.
- 2005** "Bile duct epithelial cells: Are they hepatocyte impersonators or the real thing?", Symposium on Inflammation, Repair and Carcinogenesis in Liver, Pancreas and Gastrointestinal Tract, University of California, San Francisco.

INTERNATIONAL

- 1982** Free University, Berlin, West Germany, "Cell Surface Alterations During Hepatocarcinogenesis"
1988 Symposium on Sialic Acids, Berlin, West Germany, "Antigenic Alterations during Hepatocarcinogenesis"
1990 Institute for Clinical Chemistry and Biochemistry, Berlin, W. Germany, "Antigenic Markers for Early and Late Events during Hepatocarcinogenesis in the Rat"
1994 Italian Association for the Study of the Liver, Brescia, Italy, "Hepatic Determination and Commitment"
1994 2ND CROATIAN CONGRESS OF FOOD TECHNOLOGISTS, Zagreb, Croatia, "Application of Chromatography Continuous Elution Electrophoresis and Hybridoma Technology to the Isolation and Characterization of Liver Membrane"
1995 "Tumor Associated Markers with Potential for Early Detection and Diagnosis", Zagreb, Croatia
1995 Octapharma Pharmazeutika, Vienna, Austria, "Epitope Mapping of Factor VIII"
1995 Sixth International CEA/PSG Workshop, Montreal, Canada "Characterization of p80, a cell-CAM 105 co-precipitated protein"
1996
2000 Japan Science and Technology Corporation, International Congress on "Biology and Medicine of Stem Cells", Kanagawa Prefecture, Japan, "Differentiation Status of Fetal Liver Cells and Ethionine Induced Hepatic Carcinomas Defined with Surface-Reactive Monoclonal Antibodies"
2000 "Characterization of a Novel Protein, LYRIC and its role in CEACAM 1a, Mediated Tumor Suppression of Rat Hepatocellular Carcinoma, 11th annual CEA Workshop, Bristol, England.

ACTIVE GRANT SUPPORT (TOTAL PROJECT PERIOD + INDIRECT)

NCI Grant 42715 "Cellular Origins of Liver Cancer", Douglas Hixson, P.I. Total direct- \$861,345 \$225,000 annual direct	(Active since 1985) 07/01/04 – 6/30/09
RO1 CA93840 "Genesis of Liver Carcinomas with Oval Cell Traits" Douglas C. Hixson, P. I. Total direct-\$1,112,500 222,500Annual Direct	04/01/02-03/31/06
RO1 CA73611-02 "Expression & role of TA1 Oncofetal Gene"-Liver Cancer Nancy L. Thompson, PI Total direct-\$732,186, Douglas Hixson, Co-Investigator \$142,677 annual direct	04/01/99-01/31/04
1P20RR17695 "COBRE Center for Cancer Research Development" Douglas C. Hixson, P.I. Total Direct-\$8,227,940, \$1,545,588 annual direct	09/01/02-08/31/07
A&R for COBRE Center for Cancer Research Development, Douglas Hixson, PI, Total Project Budget, \$500,000	10/1/03-9/30/04

PENDING GRANT SUPPORT

NCI Grant 42714 "Molecular Determinants of Multicellular Origin", Douglas Hixson, P.I. Total Direct-\$1,250,000, \$250,000 annual direct.	12/01/04-11/30/09
PA-05-137 "Ig-Like Adhesion Proteins as Suppressors of Hepatocellular Carcinoma", Douglas C. Hixson, P.I., Total Direct-\$1,477,396, 299,377 annual direct.	10/01/05-09/30/10

Previous Grant Support

NIH Grant 42716, "Glycoproteins during Hepatocarcinogenesis", Douglas Hixson P.I., Total direct-\$211,581	10/01/85-04/30/89
ACS Grant, CN-20 "Cloning and Expression of TuAg.1, a Novel Liver Membrane Oncofetal Antigen," Nancy Thompson, Ph.D., P.I., Douglas C. Hixson, Co-Investigator, Total direct-\$169,000	07/01/90-12/31/92

\$72,536 annual direct *6 month extension without funding	07/01/91-12/31/92*
Genetic Therapy, Inc., Ronald A. Faris, Ph.D., Investigator, Douglas C. Hixson, Ph.D., Co-Investigator, Total direct-\$305,227 \$104,680 annual direct	4/1/89-03/30/93 4/1/92-03/30/93
NCI Grant 54877 Rat Model of Transplantable Hepatocellular Cancer, P.I., Total direct-\$164,616 \$50,000 annual direct	09/01/91-08/31/93 09/01/92-08/31/93
NCI Grant 42714 "Molecular Determinants of Multicellular Origin", Douglas Hixson, P.I. Total direct-\$512,704 \$97,523 annual direct	(Active since 1981) 07/01/89-06/30/93 07/01/92-6/30/93
NCI Grant F31 CA09258 National Research Service Award Fellow: Lizeth Fowler; Sponsor: Douglas Hixson, Total direct \$74, 474 \$14.578 annual stipend and fees	10/01/91-09/30/95 10/01/94-09/30/95
Octapharma Pharmazeutika of Vienna Contract: Epitope Mapping of Factor VIII, Douglas Hixson, P.I. Total direct-\$48,250	11/01/95-10/31/97
Pliva Research Institute of Croatia Contract: Isolation, Purification and cloning of Gastric Peptide BPC, Douglas Hixson, P.I., Total Direct-\$82,360	07/01/95-06/30/96
Octapharma Pharmazeutika of Vienna Contract: Epitope Mapping of Factor VIII, Yow Pin Lim, P.I., Douglas Hixson, Co-Investigator Total Direct \$44,400	11/01/97-10/31/98
Renaissance Cell Technologies, Inc., Douglas Hixson, P.I. Total Direct \$90,497.00	04/01/98-03/31/99
Chiron Diagnostics, Immunoassay for Early Detection of Colon Cancer Yow-Pin Lim PI, Douglas Hixson, Co-investigator Total Direct \$45,455.	10/01/99-09/30/00
Octapharma Pharmazeutika of Vienna Contract: Cellular Therapy for VII and FIX deficiency, Douglas Hixson, P.I., Total Direct \$14,400.00	01/01/00-12/31/00
NCI Grant R13 CA93449-01, "12 th International CEA/PSG Symposium." Douglas C. Hixson, PI Total Direct \$3,000.00	07/29/01-07/28/02
NCI Grant 42714 "Molecular Determinants of Multicellular Origin", Douglas Hixson, P.I. Total Direct-\$990,077 \$198,170 annual direct	(Active since 1981) 04/01/99-03/31/04

TEACHING

Introductory Biology Laboratory. Two semester course for biology majors, Purdue University	1969-71
"Membrane Histochemistry", as part of a graduate level course on cell ultrastructure, 3 hrs., University of Texas Graduate School of Biomedical Sciences	1973-75

"Principles and Applications of Electron Microscopy", as part of a continuing education program for high school teachers, UTGSBS, 1 hr. each	1974 and 1975
"Structure and Binding Specificity of Plant Lectins and Uses of Lectins as Saccharide Specific Cytochemical Probes", section of UTGSBS course on Carbohydrate Chemistry, E.F. Walborg, Jr., 1 hr.	May 1978
"Monoclonal Antibodies in Immunology and Cell Biology", University of Texas at Austin, Continuing Education for High School Teachers, Dr. Spear	June 1983
Differentiation and Neoplasia as part of a graduate course entitled "Tumor Biology" UTGSBS, 6 hrs.	May 1984 - May 1985

BROWN UNIVERSITY TEACHING

201-Introduction to MCB Faculty Research, Brown University	1987-present
285-Introduction to Pathobiology Faculty Research, Brown University	1990-present
Lectures on "Stem cells in carcinogenesis" and "Experimental models of carcinogenesis" and "Cell Cycle Regulation" as part of Biology 129, "Cancer Biology" 4 hrs	1991-present
129A Cancer Biology at Pfizer Campus, "Experimental Models of Carcinogenesis" and "Stem Cells in Tissue Renewal and Carcinogenesis"	1995

Course leader:

Biology 129-Cancer Biology, Graduate and undergraduate level course covering cellular and molecular aspects of cancer biology, Brown University	Sept. 1987 - Sept. 1990
284-Topics in Pathobiology: Experimental Carcinogenesis, Graduate level course examining molecular & cellular mechanisms of chemical and viral carcinogenesis	1991-95, 1998-2000
Bio 283- Topics in Pathology: Stem Cells in Disease	2000

POSTDOCTORAL FELLOWS

Ronald Faris, Ph.D.	1983-84
Diana Dowd, Ph.D.	1986-88
Gary Piazza, Ph.D.	1987-89
Yow Pin Lim, M.D., Ph.D.	1990-92
Lan Liu, Ph.D.	1996-97
Andrew Makarovskiy	1995-99
David Mills	2004-present

NIH KO8 Mentor

Gregory Jay, MD/Ph.D., Mentored Clinical Scientist Award

M.S./PH.D. STUDENTS-THESIS COMMITTEES

Richard Kenny, M.S., UTGSBS	1975-76
-----------------------------	---------

Mark Mohr, M.S., UTGSBS	1978-79
John R. Glenney, Jr., Ph.D., UTGSBS	1977-79
Mark Mohr, Ph.D., UTGSBS	1979-82
Jeanette Mowery, Ph.D., UTGSBS (Principal advisor)	1983-89
Lili Yang, Ph.D. (Principal advisor)	1989-93
Jang-Hui Tai, M.S. (Principal advisor)	1989-90
Lizeth Fowler, M.S. (Principal advisor)	1990-95
Junsheng Sang, Ph.D	1990-94
Kamin Johnson	1991
Justina Wu	1992
Michael Laidlaw	1992
Kathy Lazaro	1993-97
Meghan Comegys, Ph.D. (Principal advisor)	1994-98
Maureen Shuh, Ph.D. (Principal advisor)	1994-95
Cheng Yu Jiang	1994-
Rahul Seth, M.S.	1994-96
Chung-Soon Im	1995
Jeong Wu Lee	1995-97
Wendy Sears	1992-97
Valerie Schultz	1994-98
Maureen Chung	1996-
William Campbell	1997-
Natalia Volodina (Principal Advisor)	1998-
Angela McBride, M.S.	1998-2000
Alice Arrentondo	2000-
Rhonda Simper (Principal Advisor)	2000-
Rebecca Rozich (Principal Advisor)	2001-
Nikia Laurie (Principal Advisor)	2001-2004
Briana Erickson (Principal Advisor)	2001-
Geoffrey Cooper	2001-
Brooke Pearson	2001-
Karen Resendes	
Stepahnie Lahousse	2001
Lisa Williams	2001-
Isel Guney	2002
Erika Lawson (Principal Advisor)	2002-
Nathan Misceles	2003

M.D./Ph.D. STUDENTS-THESIS COMMITTEES

Lori Chapman, M.D., Ph.D. (Principal advisor)	1994-2001
---	-----------

SUMMER COLLEGE TRAINEES:

UT-SPRD, Texas

Judy Mae Yep	1978
Cheryl Medlin	1979
Charles Huett	1979
John Day	1980
Maria Lordes Ponce	1981
Kevin Donahue	1982-1983
Michael Junio	1984
Chris Carter	1985
Gene Dulaney	1986
Heather Gay	1999,2000

Brown University

Steven Toms	1986
David Tsao	1986
David Lyden	1986
Guy Tillinghast	1987
Sean Ferris	2000

New York University, New York

Ryan Richman	1998-2000
--------------	-----------

Free University, Berlin

Oliver Baum	1990-1991
-------------	-----------

University of Zegreb, Croatia

Goran Valinger	1996
----------------	------

Aga Khan University Medical College, Pakistan

Saniea Majid	1999
--------------	------

UNDERGRADUATE STUDENTS (INDEPENDENT STUDY)

Melissa Basch	1988-89
Sigmund Hsu	1989-90
Greg Mazerin	1991-92
Terry Esterowitz	1991-92
Mei Yi	1992-93
Danya Kraft-Stolar	1994-94
Richard Kim	1994-95
David Coffin	1994-95
Healy Smith	1995-96
Reena Agarwal	1995-96
Christine Mareese	1996
Po Tsai	1998
Maya Vlyayaragho	1998
Antonio Dauer	1998
Sean Ferris	1999
Irene Chang	2000
Lauren Murray	2000
Vincent Browning	2000
Allisa Detz	2001-2002
Carter Romansky	2002

GRADUATE STUDENT ADVISORY COMMITTEES - Brown University

Azin Pahizgar	1987
Bryan Hoffman	1987-89
Leandros Arvanitikas	1990-91
Julie Usselman	1990-92
Wendy Sears	1991-92
Jake Curtis	1991-92
Valerie (Moyer) Schultz	1991-92
Leslie Gordon	1993

Michelle Embree	1998
Yi Song	1998
Xiaolan Hu	1998
Katarina Voronina	1998
Lisa Williams	2001
Karen Resendes	2001
Isel Guney	2002

Ph.D. - Research Rotations

Robin Travers	1988
Li Yang	1989
Lizeth Fowler	1990
Valerie (Moyer) Shultz	1992
Ted Johnson	1996

Early Identification Students

Philbert Ford	1992
Dorkina Myrick	1993
Yolanda Brown	1997
Raquel McFarland	1999