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EXPERIENCE:

LifeCell Corporation, Branchburg, NJ 1994-Present

Vice President, Clinical Sciences (2003-Present)

Vice President, Corporate Development (2001-2003)

Vice President, Clinical Development (1996-2001)

Vice President, Research and Development (1994-1996)

Telios Pharmaceuticals, Inc., San Diego, CA 1989-1994

*Senior Director of Fibrosis Research /Director of Fibrosis Research
Principal Scientist, Molecular Mechanism of Fibrosis and Scarring*

Scripps Clinic and Research Foundation, La Jolla, CA 1986-1989

Assistant Professor, Cell Biology and Biochemistry of Integrins

National Cancer Institute, Bethesda, MD. 1984-1986

Laboratory of Cellular Carcinogenesis and Tumor Promotion
Senior Staff Fellow, Keratinocyte Biology and Epithelial Differentiation

Scripps Clinic and Research Foundation, La Jolla, CA. 1981-1984

Postdoctoral Fellow, Biochemistry of Melanoma Proteoglycans

EDUCATION:

Ph.D. Biomedical Sciences-Biochemistry 1981

University of Texas Graduate School of Biomedical Sciences, Houston, TX

B.A. Psychology 1975

Baylor University, Waco, TX

ACADEMIC APPOINTMENTS AND ADVISORY AFFILIATIONS:

Adjunct Professor, University of Texas Graduate School of Biomedical Sciences 1995-present
Texas Medical Center, Houston, TX

Member of the External Advisory Board, Department of Bioengineering, Washington University, St Louis, MO 1998-present

Member, Site Visit Team
National Science Foundation, Engineering Research Center Program 1997-present

HONORS AND AWARDS:

Sigmal Xi Honor Society for Scientific Research

Robert Welch Fellowship for Chemical Research, 1978

Rosalie B. Hite Predoctoral Fellowship for Cancer Research, 1979

Outstanding Young Investigator Award, Boehringer Mannheim, 1981

National Research Service Award, NIH, 1988

FUNDING:

National Cancer Institute, Principal Investigator - 8/7/87 to 6/30/92 - *Molecular Profiles of Small Cell Lung Carcinoma Antigens* - R29 CA45626.

National Eye Institute, Phase I SBIR, Principal Investigator - 5/4/90 to 10/31/90 - *Peptide Inhibitors of Proliferative Vitreoretinopathy* - R43 EY08161.

National Institute of Diabetes and Digestive and Kidney Diseases, Phase I SBIR, Principal Investigator - 9/30/90 to 3/31/91, *Specific Inhibitors of Glomerulonephritis*, R43 DK43558.

National Institute of Diabetes and Digestive and Kidney Diseases, Phase II SBIR, Principal Investigator - 9/30/93 to 8/31/95, *Specific Inhibitors of Glomerulonephritis*, R43 DK43558.

National Scientific Foundation, Phase II SBIR, Key Investigator – 1/15/96 to 1/14/98, *Reconstituted Skin* - DMI - 9528878.

Department of Defense, Contract, Principal Investigator, *Freeze-dried, acellular vascular, peripheral nerve, and generic grafts for the treatment of combat casualties* - 12/15/96 to 12/14/98.

PUBLICATIONS:

1. Orengo, A., Lichtiger, B. and Harper, J.R. Extended storage of human platelets at 22° C: Changes in glycogen and adenine nucleotide metabolism. *Transfusion* 20: 153-158, 1980.

2. Harper, J.R. and Orengo, A. The preparation of an immunoglobulin-amyloglucosidase conjugate and its quantitation by an enzyme-cycling assay. *Anal. Biochem.* 113:51-57, 1981.
3. Harper, J.R., Mahmoudi, N. and Orengo, A. Protein A-bearing *Staphylococcus Aureus* as the solid phase in an enzyme immunoassay and its application to determination of urinary albumin. *Clin. Chem.* 28:2378-2382, 1982.
4. Reisfeld, R.A., Harper, J.R. and Bumol, T. F. Monoclonal antibodies to human tumor antigens. In: *Critical Reviews in Immunology*, (M.A. Atassi., Ed.) CRC Press, Inc. Boca Raton, Florida 1982.
5. Bumol, T.F., Harper, J.R., Chee, D.O. and Reisfeld, R.A. A biochemical and biosynthetic analysis of human melanoma associated antigens with monoclonal antibodies. In: *Hybridomas and Cellular Immortality* (B. Thom and J.P. Allison, eds.) Plenum Press, New York, 1982.
6. Reisfeld, R.A., Harper, J.R. and Bumol, T.F. Monoclonal antibodies to human cell surface antigens. In: *Monoclonal Antibodies '82* (G. Foria and F. Dammaco, eds.) Elsevier-Biomedical Press, 1982.
7. Bumol, T.F., Harper, J.R., Chee, D.O. and Reisfeld, R.A. Antigenic expression of human melanoma cells in serum-free medium. In: *Cell Culture in Support of Bioscience* (R.T. Acton and J.D. Lynn, eds.) Plenum Press, New York, 1982.
8. Harper, J.R., Bumol, T.F. and Reisfeld, R.A. Serological and biochemical analyses of monoclonal antibodies to human melanoma-associated antigens. *Hybridoma*: 1:423-432, 1982.
9. Harper, J.R. and Reisfeld, R.A. Inhibition of anchorage-independent growth of human melanoma cells by a monoclonal antibody to a chondroitin sulfate proteoglycan. *J. Natl. Cancer Inst.* 71:259-263, 1983.
10. Harper, J.R., Bumol, T.F. and Reisfeld, R.A. Characterization of monoclonal antibody 155:8 and partial characterization of its proteoglycan antigen on human melanoma cells. *J. Immunol.* 132:2096-2104, 1983.
11. Cheresch, D.A., Harper, J.R., Schulz, G. and Reisfeld, R.A. Localization of the gangliosides GD2 and GD3 in adhesion plaques on the surface of human melanoma cells. *Proc. Natl. Acad. Sci USA* 81:5767-5771, 1984.
12. Harper, J.R., Reisfeld, R.A. and Quaranta, V. Biosynthesis and intracellular transport of proteoglycan core protein by melanoma cells: Involvement of low pH mechanisms. IN: *Extracellular Matrix: Structure and Function* (A.H. Reddi, ed.) Vol. 25, pp. 367-372, 1985.

13. Harper, J.R., Quaranta, V. and Reisfeld, R.A. Ammonium chloride interferes with a distinct step in the biosynthesis and cell surface expression of human melanoma-type chondroitin sulfate proteoglycan. *J. Biol. Chem.* 261:3600-3606, 1986.
14. Spiro, R.C., Willis, W.G., Harper, J.R., Caulfield, J.P., Hein, A., Reisfeld, R.A., Austen, K.F. and Steven, R.L. Inhibition by diethylcarbamazine of post-translational modification and expression of a melanoma-associated chondroitin sulfate proteoglycan. *J. Biol. Chem.* 261:5121-5129, 1986.
15. Harper, J.R., Roop, D.R. and Yuspa, S.H. Transfection of EJ ras into keratinocytes derived from chemical-induced mouse skin papillomas causes malignant progression. *Mol. Cell. Biol.* 6:3144-3149. 1986.
16. Noronha, A.B., Harper, J.R., Reisfeld, R.A. and Quarles, R.H. The myelin-associated glycoprotein shares an epitope with a glycoprotein released by human melanoma cells. *J. Neurochem.* 47:1558-1565, 1986.
17. Roop, D.R., Lowy, D.R., Tambourin, P.E., Strickland, J.E., Harper, J.R., Balaschak, M., Spangler, E.F. and Yuspa, S.H. An activated Harvey ras oncogene produces benign tumors on mouse epidermis. *Nature* 323:822-824, 1986.
18. Harper, J.R. and Reisfeld, R.A. Cell-associated proteoglycans in human malignant melanoma. In: *Biology of Proteoglycans*, (T.N. Wight and R.P. Mecham, eds.) Academic Press, Orlando, Florida, pp. 345-366, 1987.
19. Cheresh, D.A. and Harper, J.R. Arg-Gly-Asp recognition by a cell adhesion receptor requires its 130 kDa α subunit. *J. Biol. Chem.* 262:1434-1437, 1987.
20. Harper, J.R., Reynolds, S.H., Greenhalgh, D.A., Lacal, J.C. and Yuspa, S.H. Analysis of the rasH oncogene and its p21 product in chemical-induced skin tumors and tumor derived cell lines. *Carcinogenesis* 8:1821-1825, 1987.
21. Harper, J.R., Greenhalgh, D.A. and Yuspa, S.H. Expression of transfected DNA by primary murine keratinocytes. *J. Invest. Dermatol.* 91:150-153, 1988.
22. Koyama, Y., Yang, H-M., Wargalla, U., Reisfeld, R.A. and Harper, J.R. Biochemical characterization of a sulfated phosphoglycoprotein antigen expressed on human small cell lung carcinoma. *J. Biol. Chem.* 263:806-811, 1988.
23. Spiro, R.C., Casteel, H.E., Laufer, D.M., Reisfeld, R.A. and Harper, J.R. Post-translational addition of chondroitin sulfate glycosaminoglycans: Role of N-linked oligosaccharide addition, trimming, and processing. *J. Biol. Chem.* 264:1779-1786, 1989.
24. Spiro, R.C., Laufer, D.M., Perry, S.K. and Harper, J.R. The effect of inhibitors of N-linked oligosaccharide processing on the cell surface expression of a melanoma integrin. *J. Cell. Biochem.* 41:37-45, 1989.

25. Harper, J.R., Perry, S.K., Davis, R.M. and Laufer, D.M. Human neuroectoderm-derived-cell line secretes fibronectin that shares the HNK-1/10C5 carbohydrate epitope with neural cell adhesion molecules. *J. Neurochem.* 54:395-401, 1990.
26. O'Toole, T.E., Loftus, J.C., Plow, E.F., Glass, A.A., Harper, J. R. and Ginsberg, M.H. Efficient surface expression of platelet GPIIb/IIIa requires both subunits. *Blood.* 74:14-18, 1989.
27. Harper, J.R., Prince, J.T., Healy, P.A., Stuart, J.K., Nauman, S.J. and Stallcup, W.B. Isolation and sequence of partial cDNA clones of human L1: homology of human and rodent L1 in the cytoplasmic region. *J. Neurochem.* 56:797-804, 1991.
28. Border, W.A., Noble, N.A., Yamamoto, T., Harper, J.R., Yamaguchi, Y., Pierschbacher, M.D. and Ruoslahti, E. Decorin, a natural inhibitor of transforming growth factor- β . Protects against scarring in experimental kidney disease. *Nature* 360:361-364, 1992.
29. Noble, N.A., Harper, J.R., and Border, W.A. *In vivo* interactions of TGF- β and extracellular matrix. *Prog. Growth Factor Res.* 4:369-382, 1992.
30. Harper, J.R., Spiro, R.C., Gaarde, W.A., Tamura, R.N., Pierschbacher, M.D., Noble, N.A., Stecker, K.K. and Border, W.A. Role of transforming growth factor- β and Decorin in Controlling Fibrosis. Methods in Enzymology Vol. 245, 241-254, 1994.
31. Currie, L.M., Harper, J.R., Allan, H., and Connor, J. Inhibition of cytokine accumulation and bacterial growth during storage of platelet concentrates at 4°C with retention of in vitro functional activity. *Transfusion* 37:18-24, 1996.
32. Giri, S.N., Hyde, D.M., Braun, R.K., Gaarde, W., Harper, J.R., Pierschbacher, M.D. Anti-fibrotic effect of decorin in a bleomycin hamster model of lung fibrosis. *Biochem. Pharmacol.* 54(11): 1205-1216, 1997.
33. Currie, L.M., Livesey, S.A., Harper, J.R., and Connor, J. Cryopreservation of single-donor platelets with a reduced dimethyl sulfoxide concentration by the addition of second-messenger effectors: enhanced retention of in vitro functional activity. *Transfusion* 38:160-167, 1998.
34. Harper, J.R. and Livesey, S.A., Soft tissue regeneration using acellular dermal matrix as a natural scaffold. *In: Bioengineering of Skin Substitutes.* Ed. L.M. Savage (International Business Communications, Inc. Southborough, MA) 19-41; 1998.
35. Harper, J.R. and McQuillan, D.J., Extracellular Wound Matrices: A novel Regenerative Tissue Matrix (RTM) Technology for Connective Tissue Reconstruction. *Wounds* 19(6): 163-168, 2007.
36. Sandor, M., Xu H., Connor J., Lombardi, J., Harper, J. R., Silverman, R. P., McQuillan, D. J, Host Response to Implanted Porcine-Derived Biologic Materials in a Primate Model of Abdominal Wall Repair. *Tissue Eng Part A, Dec; 14 (12): 2021-31; 2008.*

37. Xu, H., Wan, H., Sandor, M., Qi, S., Ervin, F., Harper, J. R., Silverman, R. P., McQuillan, D. J., Host Response to Human Acellular Dermal Matrix Transplantation in a Primate Model of Abdominal Wall Repair. *Tissue Eng Part A*, Dec; 14 (12): 2009-2019; 2008.
38. Xu, H., Wan, H., Zuo, W., Sun, W., Owens, R., Harper, J., Ayares, D., McQuillan, D., A Porcine-Derived Acellular Dermal Scaffold that Supports Soft Tissue Regeneration: Removal of Terminal Galactose- γ -(1,3)-Galactose and Retention of Matrix Structure. *Tissue Eng Part A*, Volume 15, Number 00, 2009.