RICHARD O. HYNES, PhD, FRS
Daniel K. Ludwig Professor for Cancer Research, MIT
Investigator, Howard Hughes Medical Institute
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EDUCATION:

Cambridge University, Cambridge, England	B.A.	1966	Biochemistry (First Class)
Cambridge University, Cambridge, England	M.A.	1970	Biochemistry
Massachusetts Institute of Technology, Cambridge, MA	Ph.D.	1971	Biology

EMPLOYMENT:

1971-1974	Research Fellow, Imperial Cancer Research Fund London, ENGLAND
1975-1978	Assistant Professor
1978-1983	Associate Professor
1983-1999	Professor of Biology Center for Cancer Research & Department of Biology Massachusetts Institute of Technology
1982-1983	Honorary Research Fellow Department of Zoology University College London, ENGLAND
1985-1989	Associate Head of Biology Department
1989-1991	Head of Biology Department
1991-2001	Director, Center for Cancer Research Massachusetts Institute of Technology
1988-Present	**Investigator, Howard Hughes Medical Institute**
1999- Present	**Daniel K. Ludwig Professor for Cancer Research** **David H. Koch Institute for Integrative Cancer Research & Department of Biology** **Massachusetts Institute of Technology**
2004- Present	**Associate Member, Broad Institute, MIT**

HONORS:

	Senior Scholar, Trinity College, Cambridge
1977	Research Career Development Award, N.I.H.
1982	John Simon Guggenheim Fellowship
1986	Harvey Lecturer
1987	Fellow, American Association for the Advancement of Science
1989	Fellow, Royal Society of London
1994	Fellow, American Academy of Arts and Sciences
1995	Member, Institute of Medicine, Natl. Acad. of Sciences, USA
1996	Member, National Academy of Sciences, USA
1997	Gairdner Foundation International Award
2000	President, American Society for Cell Biology
2007	E.B.Wilson Medal, American Society for Cell Biology

ADVISORY BOARDS: Current

Wellcome Trust, UK; Governor
NAS, Human Embryonic Stem Cell Research Advisory Committee; Co-Chair, 2006-8
NAS, Cell and Developmental Biology; Section Chair, 2006-2009
Coalition for the Life Sciences
Genentech Inc. Scientific Resource Board

OTHER PANELS: Selected Past Contributions

Cell Biology Study Section, N.I.H., 1978-1982
General Motors Cancer Research Foundation
- Sloan Prize Selection Committee, 1992, Chair 1993
- Awards Assembly 2001-2005

US Army Breast Cancer Initiative, Study Section, 1995
National Cancer Institute, Cancer Centers Branch, 1995/6
Center for Research on Inflammation, Sweden, International Review Panel, 1995
National Institute of Environmental Health Sciences, Advisory Committee 1996/7
NIH, Division of Research Grants, Advisory Committee 1995-1998
Geisinger Clinic, Scientific Advisory Committee, 1992-1997
New York Blood Center, Scientific Advisory Committee, 1993-1996
McGovern Brain Institute, Advisory Committee to Patrick McGovern, 1997
Wistar Institute, Philadelphia, Scientific Advisory Committee, 1991-1999
Jackson Laboratory, Board of Scientific Overseers, 1995-2001
Children's Hospital, Boston, Scientific Advisory Committee, Chair 1997-2002
Netherlands Cancer Institute, Division of Cell Biology, Quinquennial review, 2002
Imperial Cancer Research Fund, London, UK
- Scientific Advisory Committee, 1994 -2002

Harvard Medical School, Dept. Cell Biology, Quinquennial review, 2004
Memorial Sloan Kettering, Review of NY State Graduate Program Proposal, 2004
Harvard Medical School, Health Sciences &Technology, Quinquennial review, 2005
Center for Transgene Technology and Gene Therapy, VIB,
Leuven, Belgium, Quinquennial review, 2005
Ludwig Institute, London Branch, Quinquennial review, 2006
Cancer Research UK, London Research Institute, Quinquennial review, 2006
American Society for Cell Biology, President 2000
Executive Committee 1999-2001
Council Member, 1995-2001
Public Policy Committee 1999-2008

Joint Steering Committee for Public Policy 2001-2008
NAS/IOM Committee on Guidelines for Human Embryonic Stem Cell Research,
Co-Chair , 2004-2005
Wellcome Trust, Principal Research Fellow Interview Committee, 2004-2006
Harvard Medical School, MD/PhD Program Admissions Committee, 2002-2008
Whitehead Institute, Board of Associates
Massachusetts State Biomedical Research Advisory Council, 2005-2008
Immune Disease Institute, Boston, Scientific Advisory Board, Chair, 2006-2008
Princeton University, Dept. of Molecular Biology, Advisory Committee
Cold Spring Harbor Cancer Center, Advisory Committee,

EDITORIAL BOARDS:

1978-Present	Cell
1991-Present	Molecular Biology of the Cell
1995-Present	Current Opinion in Cell Biology
2003-Present	Molecular Cancer Research
2004-Present	Blood
1978-1985	Developmental Biology
1980-1986	BBA Reviews on Cancer
1984-1985	Journal of Cell Biology
1986-1990	Development
1990-1993	Proceedings of the Royal Society
1991-1996	Annual Review of Cell Biology
1992-2000	Cell Adhesion and Communication
1995-2002	BBA Reviews on Cancer – Online
1985	Ann. Rev. Cell Biology, Inaugural Editorial Board

MEMBERSHIPS:

American Society for Cell Biology
American Association for Cancer Research
American Association for Advancement of Science
International Society for Thrombosis and Haemostasis
North American Vascular Biology Organization
American Society for Hematology
Society for Developmental Biology
American Society of Microbiology

MEETINGS ORGANIZED:

Keystone Symposium 1979	-"Tumor Cell Surfaces & Malignancy"
Gordon Conference 1984	-"Animal Cells and Viruses"
Gordon Conference 1987	-"Fibronectin and Related Molecules"
Keystone Symposium 1990	-"Molecular Basis of Cell Adhesion"
Cold Spring Harbor Symposium 1992	-"The Cell Surface"
CIBA Foundation Symposium 1994	-"Cell Adhesion and Human Disease"
MIT Center for Cancer Research 1999	- 25th Anniversary Symposium
American Society for Cell Biology 2000	- 40th Anniversary Meeting
Keystone Symposium 2001	-"Angiogenesis and Chronic Diseases"
MIT Center for Cancer Research 2002	- Annual Symposium "Invasion and Metastasis"
CNIO Cancer Conference, Madrid, 2002	-"Mechanisms of Invasion and Metastasis"
MIT Center for Cancer Research 2003	- Annual Symposium "Stem Cells, Development and Cancer"
MIT Center for Cancer Research 2007	- Annual Symposium "Systems Biology and Cancer"

MAJOR LECTURES:-

Jeanette Piperno Memorial Award Lecture, Temple University, Philadelphia,1985

Harvey Lecture, Rockefeller University, NY, 1986

Inaugural Robert A. Fox Lecture, Wistar Institute, Philadelphia, September, 1990

EMBL Molecular Biology Lecturer, Heidelberg, Germany, October, 1991

Cold Spring Harbor Symposium, Organizer, June 1992
Honors Lecture, NYU Medical Center, January, 1993
American Cyanimid Lectures, Princeton University, Princeton, NJ, January 1993
Roon Visiting Lectureship, Scripps Research Institute, La Jolla, May, 1993

EMBL Cancer Lecturer, Heidelberg, Germany, September, 1994

Nobel Symposium, Karolinska Institute, Stockholm, Sweden,1995

Gairdner Foundation Award, Toronto, Canada, October, 1997

Biosciences Distinguished Lecture, Lawrence Berkeley Lab, May 1998
Inaugural Lou Avioli Lecture, Washington Univ, St. Louis,, May 1998
Sackler Distinguished Lecturer, University of Cambridge, England. June, 1998
Presidential Symposium, American Society of Hematology, Miami, December, 1998

Plenary Lecture, ISTH Annual Meeting, Washington, DC, August, 1999
Keynote Address, European Res. Conf., Castelvecchio, Italy, October, 1999
Elkin Distinguished Cancer Lectureship, Emory U., Atlanta, November, 1999

Inaugural Rupert Billingham Lecture, UTSW, Dallas, January,2000

Dean's Lecture, Mt Sinai Medical School, New York, January, 2001
Distinguished Lecturer, U Virginia, April 2001
General Motors Cancer Research Foundation Symp., Washington, DC, June, 2001
Goto Lecture, Thomas Jefferson Univ, Philadelphia, December, 2001

Keynote Speaker, Arizona Cancer Center, Tucson, February, 2002
ICRF 100th Anniversary Symposium, Warwick UK March 2002
Inaugural Russell Ross Lecture, U Washington, Seattle, May 2002
Keynote Speaker, National Neurofibromatosis Foundation, Aspen, CO, June, 2002

Distinguished Visitor, Biomedical Research Council, Singapore, March, 2003

Presidential Research Seminar, Memorial Sloan-Kettering. March 2004
Keynote Lecturer, Juselius Foundation Symposium, Helsinki, Finland. June 2004

Robert M. Berne Lecture, University of Virginia, November 2005

Discovery Lecture, Johns Hopkins University, February 2006
Jack Schultz Memorial Lecture, Fox Chase Cancer Center, October 2006

Leonardo da Vinci Lecture, San Raffaele Scientific Institute, Milan, Italy, April 2007
Wright-Schulte Memorial Lecture, ISTH Biennial Meeting, Geneva, Switz., July 2007
E.B. Wilson Medal Lecture, American Society for Cell Biology, December 2007

Brooks Lecture in Oncology, Vanderbilt Cancer Center, March, 2008

PUBLICATIONS:

1. Hynes, R.O. and Gross, P.R. (1970). A method for separating cells from early sea urchin embryos. Dev. Biol. 21:383-402.
2. Greenhouse, G.A., Hynes, R.O., and Gross, P.R. (1971). Sea urchin embryos are permeable to actinomycin. Science 171:686-689.
3. Hynes, R.O., Raff, R.A. and Gross, P.R. (1972). Properties of three cell types in sixteen-cell sea urchin embryos: aggregation and microtubule protein synthesis. Dev. Biol. 27:150-164.
4. Hynes, R.O., Greenhouse, G.A., Minkoff, R. and Gross, P.R. (1972). Properties of the three cell types in sixteen-cell sea urchin embryos: RNA synthesis. Dev. Biol. 27:457-478.
5. Hynes, R.O. and Gross, P.R. (1972). Informational RNA sequences in early sea urchin embryos. Biochim. Biophys. Acta 259:104-111.
6. Hynes, R.O. (1973). Alteration of cell-surface proteins by viral transformation and by proteolysis. Proc. Natl. Acad. Sci. USA 70:3170-3174.
7. Hynes, R.O. and MacPherson, I. (1974). The external proteins of hamster cells and their virus transformed derivatives. Membrane Transformations in Neoplasia. Miami Winter Symposia 8:51-63.
8. Hynes, R.O. (1974). Role of surface alterations in cell transformation: the importance of proteases and surface proteins. Cell 1:147-158.
9. Hynes, R.O. and Humphryes, K.C. (1974). Characterization of the external proteins of hamster fibroblasts. J. Cell Biol. 62:438-448.
10. Hynes, R.O. and Bye, J.M. (1974). Density and cell cycle dependence of cell surface proteins in hamster fibroblasts. Cell 3:113-120.
11. Smart, J.E. and Hynes, R.O. (1974). Developmentally regulated cell surface alterations in *Dictyostelium discoideum*. Nature 251:319-321.
12. Graham, J.M., Hynes, R.O., Davidson, E.A. and Bainton, D.F. (1975). The location of proteins labelled by the 125I-lactoperoxidase system in the NIL8 hamster fibroblast. Cell 4:353-365.
13. Hynes, R.O. and Wyke, J.A. (1975). Alterations in surface proteins in chicken cells transformed by temperature-sensitive mutants of Rous sarcoma virus. Virology 64:492-504.
14. Hynes, R.O., Wyke, J.A., Bye, J.M., Humphryes, K.C. and Pearlstein, E.S. (1975). Are proteases involved in altering surface proteins during viral transformation? Proteases and Biological Control. pp. 931-944. Cold Spring Harbor Laboratory.
15. Graham, J.M. and Hynes, R.O. (1975). Isolation and characterization of a cell surface fraction from hamster embryo fibroblasts. Biochem. Soc. Trans. 3:761-763.
16. Hynes, R.O., Martin, G.S., Shearer, M., Critchley, D.R. and Epstein, C.J. (1976). Viral transformation of rat myoblasts: effects on fusion and surface properties. Dev. Biol. 48:35-46.
17. Hynes, R.O. and Pearlstein, E.S. (1976). Investigations of the possible role of proteases in altering surface proteins of virally transformed hamster fibroblasts. J. Supramol. Struc. 4:1-14
18. Pearlstein, R., Hynes, R.O., Franks, L.M. and Hemmings, V.J. (1976). Surface proteins and fibrinolytic activity of cultured mammalian cells. Cancer Res., 36:1475-1480.
19. Hynes, R.O. (1976). Surface labelling techniques for eukaryotic cells, in "New Techniques in Biophysics and Cell Biology", 3:147-212, (R. Pain and B.J. Smith, eds.) Wiley International Publishers.
20. Hynes, R.O. (1976). Cell surface proteins and malignant transformation. Biochim. Biophys. Acta 458:73-107.
21. Critchley, D.R., Wyke, J.A. and Hynes, R.O. (1976). Cell surface and metabolic labelling of the proteins of normal and transformed chicken cells. Biochim. Biophys. Acta 436:335-352.
22. Hynes, R.O., Destree, A.T. and Mautner, V.M. (1976). Spatial organization at the cell surface, in "Membranes and Neoplasia: New Approaches and Strategies", pp. 189-201. (V.T. Marchesi, ed.) Alan R. Liss, Inc., New York.
23. Hopkins, N., Schindler, J. and Hynes, R.O. (1977). Six NB-tropic murine leukemia viruses derived from a B-tropic virus of Balb/c have altered p30. J. Virol. 21:309-318.
24. Schindler, J., Hynes, R.O. and Hopkins, N. (1977). Evidence for recombination between N- and B-tropic murine leukemia viruses: analysis of three virion proteins by SDS-polyacrylamide gel electrophoresis. J. Virol. 23:700-7.

25. Ali, I.U., Mautner, V.M., Lanza, R.P. and Hynes, R.O. (1977). Restoration of normal morphology, adhesion and cytoskeleton in transformed cells by addition of a transformation-sensitive surface protein. Cell 11:115-126.

26. Hynes, R.O. and Destree, A.T. (1977). Extensive disulfide bonding at the mammalian cell surface. Proc. Natl. Acad. Sci. 74:2855-2859.

27. Mautner, V.M. and Hynes, R.O. (1977). Surface distribution of LETS protein in relation to the cytoskeleton of normal and transformed fibroblasts. J. Cell Biol. 75:743-768.

28. Ali, I.U. and Hynes, R.O. (1977). Effects of cytochalasin B and colchicine on attachment of a major surface protein of fibroblasts. Biochim. Biophys. Acta 471:16-24.

29. Hynes, R.O., Destree, A.T., Mautner, V.M. and Ali, I.U. (1977). Synthesis, secretion, and attachment of LETS glycoprotein in normal and transformed cells. J. Supramol. Struct. 7:397-408.

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31. Dunham, J.S. and Hynes, R.O. (1978). Differences in the sulfated macromolecules synthesized by normal and transformed hamster fibroblasts. Biochim. Biophys. Acta 506:242-255.

32. Hynes, R.O. and Destree, A.T. (1978). 10 nm filaments in normal and transformed cells. Cell 13:151-163.

33. Ali, I.U. and Hynes, R.O. (1978). Role of disulfide bonds in the attachment and function of LETS glycoprotein at the cell surface. Biochem. Biophys. Acta 510:140-150.

34. Ali, I.U. and Hynes, R.O. (1978). Effects of LETS glycoprotein on cell motility. Cell 14:439-446.

35. Mahdavi, V. and Hynes, R.O. (1978). Effects of cocultivation with transformed cells on surface proteins of normal cells. Biochim. Biophys. Acta 542:191-208.

36. Schachner, M., Shoonmaker, G. and Hynes, R.O. (1978). Cellular and subcellular localization of LETS protein in the nervous system. Brain Res. 158:149-158.

37. Hynes, R.O., Ali, I.U., Destree, A.T., Mautner, V.M., Perkins, M.E. Senger, D.R., Wagner, D.D. and Smith, K. (1978). A large glycoprotein lost from the surfaces of transformed cells. Ann. N.Y. Acad. Sci. 312:317-342.

38. Graham, J.M., Hynes, R.O., Rowlatt, C.R. and Sandall, J.K. (1978). The cell surface coat of hamster fibroblasts. Ann. N.Y. Acad. Sci. 312:221-239.

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40. Hynes, R.O. and Destree, A.T. (1978). Relationships between fibronectin (LETS protein) and actin. Cell 15:875-886.

41. Hynes, R.O. editor. (1979). "Surfaces of Normal and Malignant Cells". John Wiley and Sons.

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46. Wagner, D.D. and Hynes, R.O. (1979). Domain structure of fibronectin and its relation to function. J. Biol. Chem. 254:6746-6754.

47. Cifone, M.A., Hynes, R.O. and Baker, R.M. (1979). Characteristics of concanavalin A-resistant Chinese hamster ovary cells and certain revertants. J. Cell Physiol. 100:39-54.

48. Hynes, R.O., Destree, A.T., Perkins, M.E. and Wagner, D.D. (1979). Cell surface fibronectin and oncogenic transformation. J. Supramol. Struct. 11:95-104.

49. Choi, M. and Hynes, R.O. (1979). Biosynthesis and processing of fibronectin in NIL.8 hamster cells. J. Biol. Chem., 254:12050-12055.

50. Critchley, D.R., England, M.A., Wakely, J. and Hynes, R.O. (1979). Distribution of fibronectin in the ectoderm of gastrulating chick embryos. Nature 280:498-500.

51. Wagner, D.D. and Hynes, R.O. (1980). Topological arrangement of the major structural features of fibronectin. J. Biol. Chem. 255:4304-4312.

52. Senger, D.R., Wirth, D.F. and Hynes, R.O. (l980). Transformation-specific secreted phosphoproteins. Nature 286:619-621.

53. Senger D.R., Wirth, D.F., Bryant, C. and Hynes, R.O. (1980). Transformation-specific secreted proteins in "Viral Oncogenes", Cold Spring Harbor Symposia 44:651-657.

54. Hynes, R.O. (1980). Cellular location of viral transforming proteins. Cell 21:601-602.

55. Hynes, R.O. (1980). The role of fibronectin in cell behavior. Third International Conference on Differentiation. "Differentiation and Neoplasia", ed. R.G. McKinnell et al, pp. 112-123. Springer-Verlag.

56. Hynes, R.O. and Fox, C.F. editors. (1980). "Tumor Cell Surfaces and Malignancy", Alan R. Liss, Inc., New York.

57. Courtoy, P.J., Kanwar, Y.S., Hynes, R.O. and Farquhar, M.G. (1980). Fibronectin localization in the rat glomerulus. J. Cell Biol. 87:691-696.

58. Mayer B.W., Jr., Hay, E.D. and Hynes, R.O. (1981). Immunocytochemical localization of fibronectin in embryonic chick trunk and area vasculosa. Dev. Biol. 82:267-286.

59. Van De Water, L., Schroeder, S., Crenshaw, E.B. and Hynes, R.O. (1981). Phagocytosis of gelatin-latex particles by a murine macrophage line is dependent on fibronectin and heparin. J. Cell Biol. 90:32-39.

60. Atherton, B.T. and Hynes, R.O. (1981). A difference between plasma and cellular fibronectins located with monoclonal antibodies. Cell 25:133-141.

61. Wagner, D.D., Ivatt, R., Destree, A.T. and Hynes, R.O. (1981). Similarities and differences between the fibronectins of normal and transformed hamster cells. J. Biol. Chem. 256:11708-11715.

62. Heasman, J., Hynes, R.O., Swan, A.P., Thomas, V. and Wylie, C.C. (1981). Primordial germ cells of Xenopus embryos: the role of fibronectin in their adhesion during migration. Cell 27:437-447.

63. Isliker, H., Bing, D.H. and Hynes, R.O. (1981). Interactions of fibronectin with Clq a subcomponent of the first component of complement. The Immune System, 2:231-238, eds. C.M. Steinberg and I. Lefkovits, S. Karger, Basel.

64. Hynes, R.O. (1981). Relationships between fibronectin and the cytoskeleton, In, "Cytoskeletal Elements and Plasma Membrane Organization" Cell Surface Reviews 7:97-139, eds. G. Poste and G.L. Nicolson, Elsevier-Biomed. Press.

65. Hynes, R.O. (1981). Fibronectin and its relation to cellular structure and behavior. In, "The Cell Biology of the Extracellular Matrix", ed. E.D. Hay, Plenum Press, pp. 295-333.

66. Atherton, B.T., Taylor, D.M and Hynes, R.O. (1981). Structural analysis of fibronectin with monoclonal antibodies. J. Supramol. Struct. and Cell Biochem. 17:153-161.

67. Lahav, J. and Hynes, R.O. (1981). Involvement of fibronectin, von Willebrand Factor, and fibrinogen in platelet interaction with solid substrata. J. Supramol. Struct. and Cell Biochem. 17:299-311.

68. Schwartz, M.A., Das, O.P. and Hynes, R.O. (1982). A new radioactive crosslinking reagent for studying the interactions of proteins. J. Biol. Chem. 257:2343-2349.

69. Hynes, R.O. (1982). Phosphorylation of vinculin by pp 60src: what might it mean? Cell 28:437-438.

70. Hynes, R.O., Destree, A.T. and Wagner, D.D. (1982). Relationships between fibronectin actin and cell-substratum adhesion, In, "Organization of the Cytoplasm," Cold Spring Harbor Symp. Quant. Biol. 46:659-670.

71. Hynes, R.O. (1982). Fibronectins: cell-matrix ligands in "Differentiation and Function of Hematopoietic Cell Surfaces" eds. V.T. Marchesi, R. Gallo, and P. Majerus, 157-162.

72. Van De Water, L., Wagner, D.D., Crenshaw, E.B. and Hynes, R.O. (1982). Fibronectin-Dependent Endocytosis by Macrophage-like (P388D1) and Fibroblastic (NIL8) Cells. In "Cellular Recognition". eds. L. Glaser, W. Frazier and D. Gottlieb, Alan R. Liss, Inc., New York, pp. 869-878.

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75. Isliker, H. Bing, D.H., Lahav, J. and Hynes, R.O. (1982). Fibronectin interacts with Clq, a subcomponent of the first component of complement. Immunology Letters 4:39-43.

76. Hynes, R.O. & Yamada, K.M. (1982). Fibronectins: multifunctional modular glycoproteins. J. Cell Biol. 95:369-377.

77. Lahav, J., Schwartz, M.A. and Hynes, R.O. (1982). Analysis of platelet adhesion using a radioactive chemical crosslinking reagent: interaction of thrombospondin with fibronectin and collagen. Cell 31:253-262.

78. Tamkun, J. and Hynes, R.O. (1983). Plasma fibronectin is synthesized and secreted by hepatocytes. J. Biol. Chem. 258:4641-4647.

79. Van De Water, L., Destree, A.T. and Hynes, R.O. (1983). Fibronectin binds to some bacteria but does not promote their uptake by phagocytic cells. Science 220:201-204.

80. Senger, D.R., Destree, A.T. and Hynes, R.O. (1983). Complex regulation of fibronectin synthesis by cells in culture. Am. J. Physiol. 245:144-150.

81. Schwarzbauer, J.E., Tamkun, J.W., Lemischka, I.R. and Hynes, R.O. (1983). Three different fibronectin mRNAs arise by alternative splicing within the coding region. Cell 35:421-431.

82. Lee, G., Hynes, R.O. and Kirschner, M. (1984). Temporal and spatial regulation of fibronectin in early Xenopus development. Cell 36:729-740.

83. Tamkun, J.W., Schwarzbauer, J.E. and Hynes, R.O. (1984). A single rat fibronectin gene generates three different mRNAs by alternative splicing of a complex exon. Proc. Natl. Acad. Sci. USA 81:5140-5144.

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85. Hynes, R.O., Schwarzbauer, J.E. and Tamkun, J.W. (1984). Fibronectin: a versatile gene for a versatile protein. CIBA Foundation Symp. 108 "Basement membranes and cell movement". Pitman, London. pp. 75-92.

86. Tamkun, J.W., Schwarzbauer, J.E., Paul, J.I. and Hynes, R.O. (1984). Variant fibronectin subunits are encoded by different mRNAs arising from a single gene. The Molecular Biology of Development, R. Firtel and E. Davidson, eds., Alan R. Liss, Inc. pp. 417-426.

87. Schwarzbauer, J.E., Paul, J.I. and Hynes, R.O. (1985). On the origin of species of fibronectin. Proc. Natl. Acad. Sci. USA, 81:1424-1428.

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90. Hynes, R.O. (1985). Molecular Biology of Fibronectin. Ann. Rev. Cell Biol. 1:67-90.

91. Gardner, J.M. and Hynes, R.O. (1985). Interaction of fibronectin with its receptor on platelets. Cell 42:439-448.

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93. Paul, J.I., Schwarzbauer, J.E., Tamkun, J.W. and Hynes, R.O. (1986). Cell-type-specific fibronectin subunits generated by alternative splicing. J. Biol. Chem. 261:12258-12265.

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98. Hynes, R.O. (1986). The interactions of fibronectin with platelets. in "Biology and Pathology of the Platelet - Vessel Wall Interactions" (G. Jolles, Y. Legrand and A.T. Nurden, eds.). Academic Press Inc., London. pp. 75-91.

99. Hynes, R.O. (1986). Fibronectins. Scientific American, 254:42-51.

100. Hynes, R.O. (1987). Integrins: a family of cell surface receptors. Cell, 48:549-554.

101. Hynes, R.O. (1987). Fibronectins: a family of complex and versatile adhesive glycoproteins derived from a single gene. "The Harvey Lectures", 81:133-152.

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103. Schwarzbauer, J.E., Mulligan, R.C. and Hynes, R.O. (1987a). Efficient and stable expression of recombinant fibronectin polypeptides. Proc. Natl. Acad. Sci. USA. 84:754-758.

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