CURRICULUM VITAE

PERSONAL DATA

Name	**Kenneth M. Yamada**
Country of Citizenship	USA
Birthplace	Minneapolis, MN

EDUCATION

1962-1966	BA, Biological Sciences, Stanford University, Palo Alto, CA
1966-1971	PhD, Biological Sciences, Stanford University, Palo Alto, CA
1966-1972	MD, Stanford University School of Medicine, Palo Alto, CA

EMPLOYMENT HISTORY

2011-present	NIH Distinguished Investigator, Laboratory of Cell and Developmental Biology, NIDCR, NIH, Bethesda, MD
2007-present	Chief, Laboratory of Cell and Developmental Biology, NIDCR, NIH, Bethesda, MD
1996-2007	Chief, Craniofacial Developmental Biology and Regeneration Branch, NIDCR, NIH, Bethesda, MD
1990-1996	Chief, Laboratory of Developmental Biology, NIDCR, NIH, Bethesda, MD
1983-2003	Medical Director (Captain), U.S. Public Health Service, Bethesda, MD
1980-1990	Chief, Membrane Biochemistry Section, Laboratory of Molecular Biology, NCI, NIH, Bethesda, MD
1977-1982	Senior Surgeon (rank), U.S.P.H.S., Laboratory of Molecular Biology, NCI, NIH, Bethesda, MD
1976-1977	Investigator (tenured) and Surgeon (rank), U.S.P.H.S., Laboratory of Molecular Biology, NCI, NIH, Bethesda, MD
1974-1976	Research Associate, U.S. Public Health Service, Laboratory of Molecular Biology, NCI, NIH, Bethesda, MD
1973-1974	Postdoctoral Fellow with Dr. James A. Weston, Department of Biology, University of Oregon, Eugene, OR
1972-1973	Intern, Seton Medical Center, Daly City, CA

HONORS AND AWARDS

1962-1966	Phi Beta Kappa; Stanford Chapter of Sigma Xi Undergraduate Research Award; B.A. with Great Distinction
1972	Eli Luke and Jacob David Research Award

	Stanford University
1988	Stadtler Lecture, The University of Texas System Cancer Center, M.D. Anderson Hospital
1988	Swerling Lecture, Dana-Farber Cancer Institute, Harvard Medical School
1991	Elected a Fellow of the American Association for the Advancement of Science
2000	NIDCR Director's Exemplary Service Award
2003-present	ISI Highly Cited researcher
2004	American Society for Matrix Biology first Senior Investigator Award
2005	NIH Director's Award (group)
2005	Karolinska Institute Anders Retzius Lecture
2005	Awarded Honorary Membership in the Japanese Biochemical Society
2007	Leonardo Lecture, San Raffaele Research Institute, Milan, Italy
2008	The Distinguished Scientist Award, American Association for Dental Research
2010	Appointed Honorary Professor, West China College of Stomatology, Sichuan University, China
2010	NIH Merit Award (group)
2011	Promoted to NIH Distinguished Investigator

EDITORIAL RESPONSIBILITIES

1979-1989	Associate Editor, Journal of Cellular Physiology
1989-2002	Editor, Journal of Cellular Physiology
1981-1983	Editorial Board, The Journal of Cell Biology
1982-1987	Editorial Board, The Journal of Biological Chemistry
1984-1986	Editorial Board, Annual Review of Cell Biology
1985-1991	Editorial Board, The Journal of Cell Biology
1992-1998	Associate Editor, The Journal of Cell Biology
1999-present	Editor, The Journal of Cell Biology
1991-2001	Editorial Board, Journal of Craniofacial Genetics and Developmental Biology
1992-present	Editorial Board, Journal of Cell Science
1992-1998	Editorial Board, Proceedings of Society for Experimental Biology and Medicine
1993-present	Editorial Board, Molecular Membrane Biology
1993-2001	Editorial Board, Cell Adhesion and Communication
1993-2007	Editorial Board, Cell Structure and Function

1993-1998 Editorial Board, Matrix Biology

1999-present Associate Editor, Matrix Biology

1997-present Editorial Board, Current Protocols in Cell Biology

2001-2008 Editorial Board, Cell Communication and Adhesion

2002-present Faculty of 1000

2003-present Associate Editor, Journal of Cellular Physiology

2006-2010 Editorial Committee, Annual Review of Cell and Developmental Biology

2009-present Editorial Board, Journal of Dental Research

2009-present Guest Editor for Proceedings of the National Academy of Sciences U.S.A.

INVITED PRESENTATIONS (only meetings and symposia; does not include research seminars, lectures, or contributed presentations):

1974 Conference on The Neural Crest, NIH, Bethesda, MD
1975 Gordon Research Conference on Cell Contact and Adhesion
1976 Cell Proliferation and Atherosclerosis (Battelle), Seattle, WA
1976 Conference on Biochemistry of Cell Surfaces, NIH, Bethesda, MD
1977 New York Academy of Sciences Conference on Fibroblast Surface Protein
1978 Tissue Culture Association, Denver, CO
1979 Society for Developmental Biology
1979 Gordon Research Conference on Cell Contact and Movement
1979 American Society of Biological Chemists
1979 International Congress of Biochemistry
1979 ICN UCLA Symposium on Cell Surfaces and Malignancy
1980 Gordon Research Conference on Structural Macromolecules Collagen
1980 Current Research Trends in Prenatal Craniofacial Development, NIH, Bethesda, MD
1980 Cellular Adhesion Applied to Thrombosis and Haemostasis, Nice, France
1980 Cellular Aggregation Phenomena in Multiple Sclerosis, NIH, Bethesda, MD
1980 Tumor Cell Invasion, Alexandria, VA
1981 ICN UCLA Symposium on Cellular Recognition
1981 American Society of Biological Chemists
1981 Gordon Research Conference on Cell Adhesion, Movement, and Recognition
1981 Colloquium of the Biochemical Society (England)
1981 Cold Spring Harbor Conference on Cell Proliferation
1981 American Society for Cell Biology
1982 International Academy of Pathology
1982 The Extracellular Matrix: Chemistry, Biology, Pathology First National Meeting of Connective Tissue Societies

1982 The Extracellular Matrix Michigan Molecular Institute Symposium
1982 The Structure and Regulation of Connective Tissue Genes, NIH, Bethesda
1983 Gordon Research Conference on Structural Macromolecules Collagen
1983 Gordon Research Conference on Bones and Teeth
1983 American Society for Developmental Biology
1983 British Societies for Cell Biology and Developmental Biology, Aberystwyth, Wales, U.K.
1984 American Society of Biological Chemists, St. Louis, MO
1984 Extracellular Matrix: Structure and Function UCLA Symposia on Molecular and Cellular Biology, Keystone, CO
1984 International Congress on Cell Biology, Tokyo, Japan
1984 Extracellular Matrix Macromolecules Structure and Function, Tateshina, Japan
1984 Fogarty International Center Series on Growth, Invasiveness and Metastasis of Cancer Cells, NIH
1985 Gordon Research Conference on Fibronectin
1985 American Society for Neurochemistry, Baltimore, MD
1985 The Cell in Contact: Adhesions and Junctions as Morphogenetic Determinants, The Neurosciences Institute, New York, NY
1985 Abel Symposium, Johns Hopkins University School of Medicine
1985 Biology and Pathology of the Platelet Vessel Wall Interactions, Rhone Poulenc Sante INSERM Symposium, Annecy, France
1985 American Society for Cell Biology, Atlanta, GA
1986 Fibronectin and Related Adhesive Proteins, EMBO Workshop, Camogli (Genoa), Italy
1986 Glycoconjugates in Cell Interactions, Linderstrom Lang Conference, Helsinki, Finland
1986 Biology of Carbohydrates, Fogarty International Center, Bethesda, MD
1986 American Society for Cell Biology (minisymposium), Washington, DC
1987 Gordon Research Conference on Fibronectin and Related Proteins, Santa Barbara, CA
1987 Structure and Function of Adhesion Molecules, The Neurosciences Institute, New York, NY
1987 NIH Centennial Symposium on Cell Biology
1988 U.S. Japan Cancer Program, Meeting on Cancer Cell Membranes, Oahu, Hawaii
1988 INSERM Conference on Adhesive Reactions and Cellular Functions, Seillac, France
1988 Joint Meeting of The American Society for Cell Biology and the American Society for Biochemistry and Molecular Biology (Symposium), San Francisco, CA
1989 Gordon Research Conference on Fibronectin and Related Molecules, Oxnard, CA
1989 FASEB Meeting Symposium on Matrix Proteins and Receptors, New Orleans, LA
1989 Cell Adhesion and Metastasis, University of Southampton, England
1990 UCLA Symposium on Molecular Basis of Cell Adhesion, Steamboat Springs, CO
1990 American Association of Pathologists Minisymposium on Cell Matrix Interactions, Washington, DC

1990 Joint Meeting of the American Society for Biochemistry and Molecular Biology and the American Association of Immunology (Symposium), New Orleans, LA

1990 Third International Conference on Molecular Biology and Pathology of Matrix, Philadelphia, PA

1990 FASEB Summer Research Conference on Molecular Aspects of Metastasis, Saxtons River, VT

1989 Symposium on Cell Adhesion Molecules: Role in Development and Immunity, NIH Research Festival '90

1990 Japanese Society for Cell Biology, Tokyo, Japan

1991 Gordon Research Conference on Fibronectin, Oxnard, CA; speaker and Discussion Leader

1990 American Society for Biochemistry and Molecular Biology, Symposium on Cell Adhesion and Communication, Atlanta, GA

1991 Biochemical Society of Great Britain, Manchester, England

1991 15th International Congress of Biochemistry, Jerusalem, Israel

1992 Fourth International Conference on Chemistry and Biology of Mineralized Tissues, Coronado, CA; speaker and session chair

1992 American Society of Biochemistry and Molecular Biology/Biophysical Society Symposium on Extracellular Matrix and Cell Adhesion; organizer and speaker

1992 Analysis of Development Research Workshop, University of Pennsylvania and Wistar Institute

1992 Keystone Symposium on Integrins: Cell Adhesion and Transmembrane Communication in Development and Disease, Keystone, CO

1992 Cold Spring Harbor Symposium on The Cell Surface

1992 5th International Congress on Cell Biology, Symposium on Cell Adhesion and Cell Behavior, Madrid, Spain

1992 NIH Research Festival Symposium on The Extracellular Matrix in Development and Pathology; co-organizer and speaker

1992 American Society for Cell Biology, Minisymposium on Structure and Function of Extracellular Matrix, organizer and Chair

1992 40th Annual Meeting of the Japanese Association for Dental Research, Special Lecture, Tokyo, Japan

1993 Fibronectin Gordon Research Conference, Oxnard, CA; speaker and Discussion Leader

1993 Joint Session, Keystone Symposia on Progress in Basic Research of Wound Repair and on Extracellular Matrix in Development

1993 Craniofacial Morphogenesis Workshop, Iowa City, IA

1993 Carolina Conference on Integrins and Cell Signaling, Chapel Hill, NC1993 American Society of Bone and Mineral Research symposium on Cell-Matrix Interactions, Tampa, FL

1993 3rd International Conference on Eicosanoids and Other Bioactive Lipids in Cancer, Inflammation and Radiation Injury, Washington, DC

1994 13th International Congress on Oral Biology: Tissue Repair, Victoria, BC, Canada

1994 American Association for Cancer Research, Symposium on "Cell Adhesion in Invasion and Metastasis"

1994 UCSF Research Center in Oral Biology Symposium on "Morphogenesis and Remodeling of Connective Tissues," San Francisco, CA

1994 University of Southern California Center for Craniofacial Molecular Biology Symposium on "Craniofacial Malformations: Towards a Molecular Understanding of Development," Los Angeles, CA

1994 16th International Congress of Biochemistry and Molecular Biology, Symposium on Extracellular Matrix, New Delhi, India

1995 Gordon Research Conference on Fibronectin, Integrins, and Related Molecules

1995 Gordon Research Conference on Biological Structure and Gene Expression

1995 International Association for Dental Research Symposium on "Adhesion Molecules and the Pathogenesis of Oral and Maxillofacial Diseases," Singapore

1996 Keystone Symposium on "Integrins and Signaling Events in Cell Biology and Disease," Keystone, CO

1996 Keystone Symposium on "Wound Repair in Context," Taos, NM

1996 Keystone Symposium on "Cell Migration," Santa Fe, NM

1996 American Association for the Advancement of Science Symposium: "Molecular Medicine Enters the Mouth," Baltimore, MD

1996 American Physiological Society, Symposium: "Integrins in Vascular Biology," Washington, DC

1996 Joint meeting of the American Society for Biochemistry and Molecular Biology, American Society for Investigative Pathology, and the American Association of Immunologists: Symposium on "Extracellular Matrix, Integrins, and Cell Growth and Differentiation," New Orleans, LA

1996 Conference on "Salivary Gland Biogenesis and Function," Airlie, VA

1996 Sixth World Congress for Microcirculation Symposium on "The Extracellular Matrix as a Modulator of Vascular Growth," Munich, Germany

1997 Gordon Research Conference on Fibronectin, Integrins, and Related Molecules, Ventura, CA

1997 Keystone Symposium on "Signal Transduction by Cell Adhesion Receptors," Keystone, CO

1997 INSERM-Institut Federatif de Recherche Conference on "Molecular and Cellular Basis of the Interactions between Epithelial Cells and the Extracellular Matrix: Role of Adhesion Proteins," Paris, France

1997 New York Academy of Sciences Conference on "Morphogenesis: Cell-Cell and Cell-Matrix Interactions," Bethesda, MD

1997 Third International Colloquium on "Cellular Signal Recognition and Transduction," Berlin, Germany

1997 American Society for Cell Biology, Symposium on "The Role of ECM and Integrins in Regulating Higher Order Structure and Gene Expression,"

Washington, DC

1998 SmithKline Beecham Symposium on "Integrins at the Millennium," King of Prussia, PA

1998 The Molecular Mechanisms of Cellular Motility, Boulder, CO

1998 5th International Workshop on Scleroderma Research, Keynote Lecture

1998 Third Congress of the Asian Pacific Organization for Cell Biology, "From Molecules to Man: Frontiers in Cell Biology," Plenary Lecture, Osaka, Japan

1998 10th Annual International Conference of the International Society of Differentiation, Symposium on "Cell Signaling by Extracellular Matrix," Houston, TX

1998 5th International Union of Biochemistry and Molecular Biology (IUBMB) Conference on the Biochemistry of Health and Disease, Symposium on "Cell-Matrix Interaction and Diseases, Jerusalem, Israel

1999 Gordon Conference on "Fibronectin, Integrins, and Related Molecules," Ventura, CA, Discussion leader and speaker

1999 Gordon Conference on "Salivary Glands and Saliva," Ventura, CA, Discussion leader and speaker

1999 International Association for Dental Research Symposium on "Dental and Craniofacial Research in the Post-Genome-Project Era," Vancouver, British Columbia

1999 IBC Conference on "Integrins," Special Lecture, Boston, MA

1999 Cancer Research Campaign/Association for International Cancer Research Beatson International Cancer Conference on "Invasion and Metastasis"

2000 Keystone Symposium on "Joint Regulation of Signaling Pathways by Integrins and Growth Factors," Breckenridge, Colorado

2000 Gordon Conference on "Signal Transduction by Engineered Extracellular Matrices"

2000 Gordon Conference on "Signaling by Adhesion Receptors," Newport, RI

2000 University of Washington Engineered Biomaterials Scientific Symposium 2000: Matricellular Proteins in Biology and Engineered Biomaterials, Seattle, WA

2001 Gordon Conference on "Fibronectin, Integrins and Related Molecules," Ventura, CA

2001 Gordon Conference on "Salivary Glands and Saliva," Ventura, CA

2001 Keystone Symposium on "Cell Migration and Invasion," Tahoe City, CA

2001 The Cytoskeleton and Human Disease, Marseille, France

2001 American Association for Cancer Research Symposium on "Force, Function, and Form," New Orleans, LA

2002 International Association for Dental Research Symposium on Salivary Gland Development, San Diego, CA

2002 2nd International Symposium on Extracellular Matrix, introductory keynote lecture, Angra dos Reis, Brazil

2002 "Molecular Scaffolding and Signaling at Cell Contacts," Paris, France

2003 Keystone Symposium on "Cell Migration and Invasion," Breckenridge, CO

2003 Gordon Conference on "Fibronectin, Integrins and Related Molecules," Ventura, CA

2003 The Neural Crest: New Perspectives on Lineage and Morphogenesis, Mt. Hood, OR

2003 National Cancer Institute Metastasis Working Group retreat (invited lecture)

2003 NSF-NIH National Nanotechnology Initiative Workshop on NanoBiotechnology (plenary speaker), Washington, DC

2003 NHRI Symposium on Signal Transduction, Taiwan

2003 5th International Symposium on Biomimetic Interfaces, Seoul, Korea

2004 International Association for Dental Research Symposium on "Oral and Systemic Diseases: Current and Future Indications," Honolulu, Hawaii

2004 American Association for Cancer Research Symposium on "Outside-In Signaling in Cancer," Orlando, FL

2004 Gordon Conference on "Signaling by Adhesion Receptors" speaker and session discussion leader, Bristol, RI

2004 American Society for Matrix Biology 2nd National Meeting Plenary Session on "Regenerative Medicine and Organogenesis" session chair and speaker

2005 Gordon Conference on "Fibronectin, Integrins and Related Molecules" speaker and session discussion leader, Ventura, CA

2005 MD Anderson Cancer Center Special Symposium on Phage Genetics, Matrix Biology Development and Cancer, Houston, TX

2005 The American Society for Cell Biology 2005 Summer Meeting on Engineering Cell Biology–The Cell in Context, Seattle, WA

2005 European Research Group for Oral Biology (ERGOB) conference "Facing the Future–Challenges in Oral Biology," Geneva, Switzerland

2005 78th annual meeting of the Japanese Biochemical Society, Special Lecture, Kobe, Japan

2006 Gordon Conference on "Craniofacial Morphogenesis and Tissue Regeneration," Ventura, CA

2006 20th IUBMB International Congress of Biochemistry and Molecular Biology, Kyoto, Japan

2006 University of California Systemwide Bioengineering Symposium, keynote speaker, Los Angeles, CA

2006 Gordon Conference on "Signal Transduction by Engineered Extracellular Matrices," New London, CT

2006 American Society for Cell Biology Symposium on "Coordination of Adhesion and Migration," 46th Annual Meeting, San Diego, CA

2007 Gordon Conference on "Salivary Glands and Exocrine Secretion," opening Keynote Lecture, Ventura, CA

2007 Gordon Conference on "Fibronectin, Integrins & Related Molecules," Barga, Italy

2007 American Society for Cell Biology Special Interest Subgroup Meeting on Cell Matrix Interactions, 47th Annual Meeting, Washington, DC

2008 Timberline Symposium on Epithelial Cell Biology – 3D Tissue Biology: Human Stem Cells, Cancer and the Microenvironment, Mount Hood, OR

2008 14th Canadian Connective Tissue Conference, keynote speaker, Montreal, Canada

2008 Council of Science Editors Annual Meeting session on Ethics of Image Manipulation,

Vancouver, Canada

2008 14th Canadian Connective Tissue Conference, keynote lecture, Montreal, Canada

2008 British Society of Cell Biology "Epithelial Morphogenesis and Diseases," Greenwich, London, UK

2008 Frontiers in Cell Migration, Bethesda, MD

2008 Tissue Engineering and Regenerative Medicine International Society (TERMIS), San Diego, CA

2008 American Society American Society for Cell Biology Special Interest Subgroup Meeting on "Bridging Engineering and Life Sciences: Next Generation Tools for Cell Biology, 48th Annual Meeting, Washington, DC

2009 Inauguration Symposium: New Ideas in Contractile Activity, Bethesda, MD

2009 Gordon Conference on Fibronectin, Integrins & Related Molecules,Ventura, CA

2009 Cell Mechanics and Motility Symposium, College Park, MD

2009 Regenerative Medicine and Information Matrix Symposium, Center for Craniofacial Molecular Biology, University of Southern California, Los Angeles, CA

2009 Cell Biology of Disease: Chromosomes, Cancer, and Stem Cells, New York Academy of Sciences and the Journal of Cell Biology, Keynote Lecture, New York, NY

2009 Ernst Klenk Symposium in Molecular Medicine: Extracellular Matrix in Health and Disease, Cologne, Germany

2009 Organ Morphogenesis Symposium, NIH Research Festival, Bethesda, MD

2010 International Symposium “Life of Proteins Symposium,” Kyoto, Japan

2010 American Society for Dental Research, Distinguished Lecture, Washington, DC

2010 Sino-US Dental Summit, Keynote Lecture, Chengdu, China

2010 Society of Craniofacial Genetics, Keynote Lecture, Bethesda, MD

2010 UNC Department of Cell and Developmental Biology Retreat, Keynote Lecture, Cashiers, NC

2011 Gordon Conference on Salivary Glands and Exocrine Biology, Keynote Speaker, Galveston, TX

2011 Gordon Conference on Fibronectin, Integrins & Related Molecules, Barga, Italy

EXTRAMURAL ACTIVITIES (SELECTED)

1979-1990 External Advisory Committee, Howard University Cancer Research Center

1980-1983 Board of Directors, Southeastern Cancer Research Association

1982 Co-Chair, first Gordon Conference on Fibronectin and Integrins

1979-1983 Member, NIH Cell Biology Study Section (Regular member)

1997-1998 Member, Program Committee, American Society for Cell Biology

1999-2004 Member, International Scientific Review Board, Department of Molecular Pathology and Medicine, San Raffaele Scientific Institute (DIBIT), Milan, Italy

1999 Member, NIH Special Emphasis Panel for review of grants from NIH Study

	Section members
2002	Ad hoc member, NIH Pathobiochemistry Study Section
2003	Member, NIH Special Emphasis Panel
2004	Ad hoc member, NIH Pathobiochemistry Study Section
2006	Member, Nomination Committee, American Society for Cell Biology
2008	Member, NIH Special Emphasis Panel/Scientific Review Group on Epidemiology and Genetics of Cancer
2009	Reviewer, NIH Challenge grants
2010	Elected to Steering Committee, American Association for the Advancement of Science Section R: Dentistry and Oral Health Sciences, 2011-2014

MEMBERSHIP IN PROFESSIONAL SOCIETIES

American Association for the Advancement of Science; elected a Fellow in 1991

American Society for Cell Biology; Council member 1992-1995

American Society for Matrix Biology; elected to Council twice; Federal liaison (2003-present)

International Society for Matrix Biology; elected to Council five times (1994-2005)

International Association for Dental Research and American Association for Dental Research

American Society for Biochemistry and Molecular Biology

Society of Craniofacial Genetics

Society for Developmental Biology

INTRAMURAL ACTIVITIES OUTSIDE THE NIDCR DIR (since 1992)

1992-1994	Primary member, NIH Intramural Scientists Procurement Advisory Committee
1993	Member, NIH committee to revise the "Guidelines for the Conduct of Research at the National Institutes of Health"
1994-1996	Charter Member, Central NIH Tenure Committee
1994	Member, Search Committee for Director, DIR, NIEH
1995-present	Charter Member, NIH Senior Biomedical Research Service Policy Board
1997	Chair, Senior Biomedical Research Service review committee for cell biology
1997	Member, Japan Society for the Promotion of Science NIH fellowship review committee
1997-2005	Member, NSF Scholars-in-Residence advisory committee
1998-present	Member, NIH Committee on Scientific Conduct and Ethics
1999-present	Charter Member, NIH Postdoctoral Fellow Awards Committee

2003	Member, NHLBI tenure track selection committee
2004-present	Executive Committee, NIH Assembly of Scientists
2006-present	NIH Library Advisory Committee
2007	Ad hoc member, NIAMS Promotion and Tenure Panel
2007-present	NIH Advisory Committee on Ethics Regulation Implementation (ACERI)
2007	Member, Selection Committee, NIH Associate Ombudsman
2008-present	Member, Trans-NIH Mentoring Committee

ACTIVITIES WITHIN THE NIDCR DIR

1991-1995	Chair, NIDR Tenure and Promotion Committee
1992-1993	NIH Intramural Research Liaison, Blue Ribbon Panel on Envisioning the Future of the NIDR Intramural Research Program
1992-1993	Member, Search Committee for Director, Intramural Research Program, NIDR
1993-1994	Member, NIDR Internal Advisory Committee
1994	Member, Search Committee for Director, NIDR
1994-2007	Acting Scientific Director, NIDCR, on ad hoc basis as requested
1994-present	Chair, Gene Targeting Facility oversight committee
1994-present	Member, DNA sequencing core oversight committee
1995-1998	Member, NIDR Strategic Planning Steering Committee
1995	Chair, Search Committee for Clinical Director, NIDR
1996	Chair, Search Committee for Chief, Oral Infection and Immunity Branch, NIDR
1996-2004	Member, Administrative oversight committee
1996-1999	Project Officer, NIDCR Contract N01-DE-62615 “Production of Antibodies to New Craniofacial Genes Relevant to Anomalies and Oral Cancers”
1996-1997	Member, Performance Management Workgroup
1997	Co-organizer, Craniofacial Genetic Diseases and Disorders Workshop
1997-1998	Member, Search Committee for Director, Division of Extramural Research, NIDCR
1998	Symposium co-organizer: “Toward a Molecular Understanding of Craniofacial Morphogenesis: An International Symposium,” Bethesda, MD
1999	Organizing committee, NIDCR Genetics Work Group meeting
1999	Member, Selection Committee for Clinical Director, NIDCR
1999-2003	Project Officer, NIDCR Contract N01-DE-92630 “Novel Human Oral and Craniofacial Genes”

2002	Member, Search Committee for Principal Administrative Officer, DIR, NIDCR
2004	Member, Search Committee for Scientific Director, NIDCR
2004	Member, Search Committee for Head, Sjögren's Syndrome Clinic, NIDCR
2005	NIDCR Strategic Plan Working Groups for Craniofacial Developmental Biology and Bone Research; Saliva and Sjogren's Syndrome; and Biomimetics, Tissue Engineering, Nanotechnology, Biomaterials and Industry Relations
2007	Member, Search Committee for Deputy Director, DIR, NIDCR
2007-2010	Member, NIDCR BSC Website Steering Committee
2011-present	Member, IT Core Advisory Committee

BIBLIOGRAPHY

Citation analysis H-index = 114. Thomson Reuters Web of Science total number of citations > 43,000; average number of citations/paper = 108.

Peer-reviewed research articles

1. Yamada KM, Spooner BS, Wessells NK. 1970. Axon growth: Roles of microfilaments and microtubules. Proc Natl Acad Sci U S A. 66(4): 1206-1212.
2. Yamada KM, Spooner BS, Wessells NK. 1971. Ultrastructure and function of growth cones and axons of cultured nerve cells. J Cell Biol. 49(3): 614-635.
3. Yamada KM, Wessells NK. 1971. Axon elongation. Effect of nerve growth factor on microtubule protein. Exp Cell Res. 66(2): 346-352.
4. Yamada KM, Wessells NK. 1973. Cytochalasin B: Effects on membrane ruffling, growth cone and microspike activity, and microfilament structure not due to altered glucose transport. Dev Biol. 31(2): 413-420.
5. Yamada KM, Weston JA. 1974. Isolation of a major cell surface glycoprotein from fibroblasts. Proc Natl Acad Sci U S A. 71(9): 3492-3496.
6. Yamada KM, Weston JA. 1975. The synthesis, turnover, and artificial restoration of a major cell surface glycoprotein. Cell. 5(1): 75-81.
7. Yamada KM, Yamada SS, Pastan I. 1975. The major cell surface glycoprotein of chick embryo fibroblasts is an agglutinin. Proc Natl Acad Sci U S A. 72(8): 3158-3162.
8. Yamada KM, Ohanian SH, Pastan I. 1976. Cell surface protein decreases microvilli and ruffles on transformed mouse and chick cells. Cell. 9(2): 241-245.
9. Yamada KM, Pastan I. 1976. The relationship between cell surface protein and glucose and alpha-aminoisobutyrate transport in transformed chick and mouse cells. J Cell Physiol. 89(4): 827-829.
10. Yamada KM, Yamada SS, Pastan I. 1976. Cell surface protein partially restores morphology, adhesiveness, and contact inhibition of movement to transformed fibroblasts. Proc Natl Acad Sci U S A. 73(4): 1217-1221.

11. Olden K, Yamada KM. 1977. Mechanism of the decrease in the major cell surface protein of chick embryo fibroblasts after transformation. Cell. 11(4): 957-969.
12. Olden K, Yamada KM. 1977. Direct detection of antigens in sodium dodecyl sulfate-polyacrylamide gels. Anal Biochem. 78(2): 483-490.
13. Schlessinger J, Barak LS, Hammes GG, Yamada KM, Pastan I, Webb WW, Elson EL. 1977. Mobility and distribution of a cell surface glycoprotein and its interaction with other membrane components. Proc Natl Acad Sci U S A. 74(7): 2909-2913.
14. Willingham MC, Yamada KM, Yamada SS, Pouyssegur J, Pastan I. 1977. Microfilament bundles and cell shape are related to adhesiveness to substratum and are dissociable from growth control in cultured fibroblasts. Cell. 10(3): 375-380.
15. Yamada KM, Schlesinger DH, Kennedy DW, Pastan I. 1977. Characterization of a major fibroblast cell surface glycoprotein. Biochemistry. 16(25): 5552-5559.
16. Yamada KM, Yamada SS, Pastan I. 1977. Quantitation of a transformation-sensitive, adhesive cell surface glycoprotein. Decrease of several untransformed permanent cell lines. J Cell Biol. 74(2): 649-654.
17. Alexander SS, Jr., Colonna G, Yamada KM, Pastan I, Edelhoch H. 1978. Molecular properties of a major cell surface protein from chick embryo fibroblasts. J Biol Chem. 253(16): 5820-5824.
18. Colonna G, Alexander SS, Jr., Yamada KM, Pastan I, Edelhoch H. 1978. The stability of cell surface protein to surfactants and denaturants. J Biol Chem. 253(21): 7787-7790.
19. Olden K, Pratt RM, Yamada KM. 1978. Role of carbohydrates in protein secretion and turnover: Effects of tunicamycin on the major cell surface glycoprotein of chick embryo fibroblasts. Cell. 13(3): 461-473.
20. Yamada KM. 1978. Immunological characterization of a major transformation-sensitive fibroblast cell surface glycoprotein. Localization, redistribution, and role in cell shape. J Cell Biol. 78(2): 520-541.
21. Fagan JB, Yamada KM, de Crombrugghe B, Pastan I. 1979. Partial purification and characterization of the messenger RNA for cell fibronectin. Nucleic Acids Res. 6(11): 3471-3480.
22. Hahn L-HE, Yamada KM. 1979. Isolation and biological characterization of active fragments of the adhesive glycoprotein fibronectin. Cell. 18(4): 1043-1051.
23. Hahn L-HE, Yamada KM. 1979. Identification and isolation of a collagen-binding fragment of the adhesive glycoprotein fibronectin. Proc Natl Acad Sci U S A. 76(3): 1160-1163.
24. Hassell JR, Pennypacker JP, Kleinman HK, Pratt RM, Yamada KM. 1979. Enhanced cellular fibronectin accumulation in chondrocytes treated with vitamin A. Cell. 17(4): 821-826.
25. Olden K, Pratt RM, Jaworski C, Yamada KM. 1979. Evidence for role of glycoprotein carbohydrates in membrane transport: Specific inhibition by tunicamycin. Proc Natl Acad Sci U S A. 76(2): 791-795.

26. Olden K, Pratt RM, Yamada KM. 1979. Selective cytotoxicity of tunicamycin for transformed cells. Int J Cancer. 24(1): 60-66.
27. Olden K, Pratt RM, Yamada KM. 1979. Role of carbohydrate in biological function of the adhesive glycoprotein fibronectin. Proc Natl Acad Sci U S A. 76(7): 3343-3347.
28. Pennypacker JP, Hassell JR, Yamada KM, Pratt RM. 1979. The influence of an adhesive cell surface protein on chondrogenic expression in vitro. Exp Cell Res. 121(2): 411-415.
29. Podleski TR, Greenberg I, Schlessinger J, Yamada KM. 1979. Fibronectin delays the fusion of L6 myoblasts. Exp Cell Res. 122(2): 317-326.
30. Pratt RM, Yamada KM, Olden K, Ohanian SH, Hascall VC. 1979. Tunicamycin-induced alterations in the synthesis of sulfated proteoglycans and cell surface morphology in the chick embryo fibroblast. Exp Cell Res. 118(2): 245-252.
31. Weston JA, Yamada KM, Hendricks KL. 1979. Characterization of factor(s) in culture supernatants affecting cell social behavior. J Cell Physiol. 100(3): 445-456.
32. Yamada KM, Kennedy DW. 1979. Fibroblast cellular and plasma fibronectins are similar but not identical. J Cell Biol. 80(2): 492-498.
33. Fox CH, Cottler-Fox MH, Yamada KM. 1980. The distribution of fibronectin in attachment sites of chick fibroblasts. Exp Cell Res. 130(2): 477-481.
34. Hayashi M, Schlesinger DH, Kennedy DW, Yamada KM. 1980. Isolation and characterization of a heparin-binding domain of cellular fibronectin. J Biol Chem. 255(21): 10017-10020.
35. Milhaud P, Yamada KM, Gottesman MM. 1980. Sodium butyrate affects expression of fibronectin on CHO cells: specific increase in antibody-complement-mediated cytotoxicity. J Cell Physiol. 104(2): 163-170.
36. Olden K, Hunter VA, Yamada KM. 1980. Biosynthetic processing of the oligosaccharide chains of cellular fibronectin. Biochim Biophys Acta. 632(3): 408-416.
37. Yamada KM, Kennedy DW, Kimata K, Pratt RM. 1980. Characterization of fibronectin interactions with glycosaminoglycans and identification of active proteolytic fragments. J Biol Chem. 255(13): 6055-6063.
38. Yamada SS, Yamada KM, Willingham MC. 1980. Intracellular localization of fibronectin by immunoelectron microscopy. J Histochem Cytochem. 28(9): 953-960.
39. Fagan JB, Sobel ME, Yamada KM, de Crombrugghe B, Pastan I. 1981. Effects of transformation on fibronectin gene expression using cloned fibronectin cDNA. J Biol Chem. 256(1): 520-525.
40. Hayashi M, Yamada KM. 1981. Differences in domain structures between plasma and cellular fibronectins. J Biol Chem. 256(21): 11292-11300.
41. Kasuga M, Kahn CR, Hedo JA, Van Obberghen E, Yamada KM. 1981. Insulin-induced receptor loss in cultured human lymphocytes is due to accelerated receptor degradation. Proc Natl Acad Sci U S A. 78(11): 6917-6921.
42. Kasuga M, van Obberghen E, Yamada KM, Harrison LC. 1981. Autoantibodies against the insulin receptor recognize the insulin binding subunits of an oligomeric receptor.

Diabetes. 30(4): 354-357.

43. Keski-Oja J, Yamada KM. 1981. Isolation of an actin-binding fragment of fibronectin. Biochem J. 193(2): 615-620.
44. Marquette D, Molnar J, Yamada K, Schlesinger D, Darby S, Van Alten P. 1981. Phagocytosis-promoting activity of avian plasma and fibroblastic cell surface fibronectins. Mol Cell Biochem. 36(3): 147-155.
45. Seppa HE, Yamada KM, Seppa ST, Silver MH, Kleinman HK, Schiffmann E. 1981. The cell binding fragment of fibronectin is chemotactic for fibroblasts. Cell Biol Int Rep. 5(8): 813-819.
46. Sieber-Blum M, Sieber F, Yamada KM. 1981. Cellular fibronectin promotes adrenergic differentiation of quail neural crest cells in vitro. Exp Cell Res. 133(2): 285-295.
47. Yamada KM, Kennedy DW, Grotendorst GR, Momoi T. 1981. Glycolipids: Receptors for fibronectin? J Cell Physiol. 109(2): 343-351.
48. Bernard BA, Yamada KM, Olden K. 1982. Carbohydrates selectively protect a specific domain of fibronectin against proteases. J Biol Chem. 257(14): 8549-8554.
49. Dubbelman TM, Yamada KM. 1982. A survey of differences between membrane polypeptides of transformed and nontransformed chick embryo fibroblasts. Biochim Biophys Acta. 693(1): 177-187.
50. Hayashi M, Yamada KM. 1982. Divalent cation modulation of fibronectin binding to heparin and to DNA. J Biol Chem. 257(9): 5263-5267.
51. Kasuga M, Hedo JA, Yamada KM, Kahn CR. 1982. The structure of insulin receptor and its subunits. Evidence for multiple nonreduced forms and a 210,000 possible proreceptor. J Biol Chem. 257(17): 10392-10399.
52. Katow H, Yamada KM, Solursh M. 1982. Occurrence of fibronectin on the primary mesenchyme cell surface during migration in the sea urchin embryo. Differentiation. 22(2): 120-124.
53. Hayashi M, Yamada KM. 1983. Domain structure of the carboxyl-terminal half of human plasma fibronectin. J Biol Chem. 258(5): 3332-3340.
54. Hedo JA, Kahn CR, Hayashi M, Yamada KM, Kasuga M. 1983. Biosynthesis and glycosylation of the insulin receptor. Evidence for a single polypeptide precursor of the two major subunits. J Biol Chem. 258(16): 10020-10026.
55. Hirano H, Yamada Y, Sullivan M, de Crombrugghe B, Pastan I, Yamada KM. 1983. Isolation of genomic DNA clones spanning the entire fibronectin gene. Proc Natl Acad Sci U S A. 80(1): 46-50.
56. Kennedy DW, Rohrbach DH, Martin GR, Momoi T, Yamada KM. 1983. The adhesive glycoprotein laminin is an agglutinin. J Cell Physiol. 114(3): 257-262.
57. Rovasio RA, Delouvee A, Yamada KM, Timpl R, Thiery JP. 1983. Neural crest cell migration: Requirements for exogenous fibronectin and high cell density. J Cell Biol. 96(2): 462-473.
58. Yamada KM, Critchley DR, Fishman PH, Moss J. 1983. Exogenous gangliosides enhance

the interaction of fibronectin with ganglioside-deficient cells. Exp Cell Res. 143(2): 295-302.

59. Bernard BA, Akiyama SK, Newton SA, Yamada KM, Olden K. 1984. Structural and functional comparisons of chicken and human cellular fibronectins. J Biol Chem. 259(15): 9899-9905.
60. Bernard BA, De Luca LM, Hassell JR, Yamada KM, Olden K. 1984. Retinoic acid alters the proportion of high mannose to complex type oligosaccharides on fibronectin secreted by cultured chondrocytes. J Biol Chem. 259(8): 5310-5315.
61. Boucaut JC, Darribere T, Poole TJ, Aoyama H, Yamada KM, Thiery JP. 1984. Biologically active synthetic peptides as probes of embryonic development: A competitive peptide inhibitor of fibronectin function inhibits gastrulation in amphibian embryos and neural crest cell migration in avian embryos. J Cell Biol. 99(5): 1822-1830.
62. Holly FJ, Dolowy K, Yamada KM. 1984. Comparative surface chemical studies of cellular fibronectin and submaxillary mucin monolayers: Effects of pH, ionic strength, and presence of calcium ions. J Colloid Interf Sci. 100: 210-215.
63. Yamada KM, Kennedy DW. 1984. Dualistic nature of adhesive protein function: Fibronectin and its biologically active peptide fragments can autoinhibit fibronectin function. J Cell Biol. 99(1): 29-36.
64. Akiyama SK, Hasegawa E, Hasegawa T, Yamada KM. 1985. The interaction of fibronectin fragments with fibroblastic cells. J Biol Chem. 260(24): 13256-13260.
65. Akiyama SK, Yamada KM. 1985. Synthetic peptides competitively inhibit both direct binding to fibroblasts and functional biological assays for the purified cell-binding domain of fibronectin. J Biol Chem. 260(19): 10402-10405.
66. Akiyama SK, Yamada KM. 1985. The interaction of plasma fibronectin with fibroblastic cells in suspension. J Biol Chem. 260(7): 4492-4500.
67. Akiyama SK, Yamada KM. 1985. Comparisons of evolutionarily distinct fibronectins: Evidence for the origin of plasma and fibroblast cellular fibronectins from a single gene. J Cell Biochem. 27(2): 97-107.
68. Chen W-T, Hasegawa E, Hasegawa T, Weinstock C, Yamada KM. 1985. Development of cell surface linkage complexes in cultured fibroblasts. J Cell Biol. 100(4): 1103-1114.
69. Hasegawa T, Hasegawa E, Chen W-T, Yamada KM. 1985. Characterization of a membrane-associated glycoprotein complex implicated in cell adhesion to fibronectin. J Cell Biochem. 28(4): 307-318.
70. Haverstick DM, Cowan JF, Yamada KM, Santoro SA. 1985. Inhibition of platelet adhesion to fibronectin, fibrinogen, and von Willebrand factor substrates by a synthetic tetrapeptide derived from the cell-binding domain of fibronectin. Blood. 66(4): 946-952.
71. Nagata K, Humphries MJ, Olden K, Yamada KM. 1985. Collagen can modulate cell interactions with fibronectin. J Cell Biol. 101(2): 386-394.
72. Spiegel S, Yamada KM, Hom BE, Moss J, Fishman PH. 1985. Fluorescent gangliosides as probes for the retention and organization of fibronectin by ganglioside-deficient mouse

cells. J Cell Biol. 100(3): 721-726.

73. Yamada KM, Kennedy DW. 1985. Amino acid sequence specificities of an adhesive recognition signal. J Cell Biochem. 28(2): 99-104.
74. Akama T, Yamada KM, Seno N, Matsumoto I, Kono I, Kashiwagi H, Funaki T, Hayashi M. 1986. Immunological characterization of human vitronectin and its binding to glycosaminoglycans. J Biochem (Tokyo). 100(5): 1343-1351.
75. Akiyama SK, Yamada SS, Yamada KM. 1986. Characterization of a 140-kDa avian cell surface antigen as a fibronectin-binding molecule. J Cell Biol. 102(2): 442-448.
76. Chen W-T, Wang J, Hasegawa T, Yamada SS, Yamada KM. 1986. Regulation of fibronectin receptor distribution by transformation, exogenous fibronectin, and synthetic peptides. J Cell Biol. 103(5): 1649-1661.
77. Duband J-L, Rocher S, Chen W-T, Yamada KM, Thiery JP. 1986. Cell adhesion and migration in the early vertebrate embryo: Location and possible role of the putative fibronectin receptor complex. J Cell Biol. 102(1): 160-178.
78. Gutman A, Yamada KM, Kornblihtt A. 1986. Human fibronectin is synthesized as a pre-propolypeptide. FEBS Lett. 207(1): 145-148.
79. Humphries MJ, Akiyama SK, Komoriya A, Olden K, Yamada KM. 1986. Identification of an alternatively spliced site in human plasma fibronectin that mediates cell type-specific adhesion. J Cell Biol. 103(6 Pt 2): 2637-2647.
80. Humphries MJ, Olden K, Yamada KM. 1986. A synthetic peptide from fibronectin inhibits experimental metastasis of murine melanoma cells. Science. 233(4762): 467-470.
81. Nagata K, Saga S, Yamada KM. 1986. A major collagen-binding protein of chick embryo fibroblasts is a novel heat shock protein. J Cell Biol. 103(1): 223-229.
82. Nagata K, Yamada KM. 1986. Phosphorylation and transformation sensitivity of a major collagen-binding protein of fibroblasts. J Biol Chem. 261(16): 7531-7536.
83. Sagara J, Yamada KM, Kakunaga T. 1986. Induction of an unusual type of shared phosphorylation in human and avian cells by tumor-promoting phorbol esters or transformation. Cancer Res. 46(10): 5291-5296.
84. Savagner P, Imhof BA, Yamada KM, Thiery JP. 1986. Homing of hemopoietic precursor cells to the embryonic thymus: Characterization of an invasive mechanism induced by chemotactic peptides. J Cell Biol. 103(6): 2715-2727.
85. Spiegel S, Yamada KM, Hom BE, Moss J, Fishman PH. 1986. Fibrillar organization of fibronectin is expressed coordinately with cell surface gangliosides in a variant murine fibroblast. J Cell Biol. 102(5): 1898-1906.
86. Urushihara H, Yamada KM. 1986. Evidence for involvement of more than one class of glycoprotein in cell interactions with fibronectin. J Cell Physiol. 126(3): 323-332.
87. Yamagata M, Yamada KM, Yoneda M, Suzuki S, Kimata K. 1986. Chondroitin sulfate proteoglycan (PG-M-like proteoglycan) is involved in the binding of hyaluronic acid to cellular fibronectin. J Biol Chem. 261(29): 13526-13535.
88. Akiyama SK, Yamada KM. 1987. Biosynthesis and acquisition of biological activity of

the fibronectin receptor. J Biol Chem. 262(36): 17536-17542.

89. Humphries MJ, Komoriya A, Akiyama SK, Olden K, Yamada KM. 1987. Identification of two distinct regions of the type III connecting segment of human plasma fibronectin that promote cell type-specific adhesion. J Biol Chem. 262(14): 6886-6892.
90. Lash JW, Linask KK, Yamada KM. 1987. Synthetic peptides that mimic the adhesive recognition signal of fibronectin: Differential effects on cell-cell and cell-substratum adhesion in embryonic chick cells. Dev Biol. 123(2): 411-420.
91. Naidet C, Semeriva M, Yamada KM, Thiery JP. 1987. Peptides containing the cell-attachment recognition signal Arg-Gly-Asp prevent gastrulation in *Drosophila* embryos. Nature. 325(6102): 348-350.
92. Obara M, Kang MS, Rocher-Dufour S, Kornblihtt A, Thiery JP, Yamada KM. 1987. Expression of the cell-binding domain of human fibronectin in *E. coli*. Identification of sequences promoting full to minimal adhesive function. FEBS Lett. 213(2): 261-264.
93. Saga S, Nagata K, Chen W-T, Yamada KM. 1987. pH-dependent function, purification, and intracellular location of a major collagen-binding glycoprotein. J Cell Biol. 105(1): 517-527.
94. Yamada KM, Kennedy DW. 1987. Peptide inhibitors of fibronectin, laminin, and other adhesion molecules: Unique and shared features. J Cell Physiol. 130(1): 21-28.
95. Darribere T, Yamada KM, Johnson KE, Boucaut JC. 1988. The 140-kDa fibronectin receptor complex is required for mesodermal cell adhesion during gastrulation in the amphibian *Pleurodeles waltlii*. Dev Biol. 126(1): 182-194.
96. Duband J-L, Dufour S, Yamada KM, Thiery JP. 1988. The migratory behavior of avian embryonic cells does not require phosphorylation of the fibronectin-receptor complex. FEBS Lett. 230(1-2): 181-185.
97. Duband J-L, Nuckolls GH, Ishihara A, Hasegawa T, Yamada KM, Thiery JP, Jacobson K. 1988. Fibronectin receptor exhibits high lateral mobility in embryonic locomoting cells but is immobile in focal contacts and fibrillar streaks in stationary cells. J Cell Biol. 107(4): 1385-1396.
98. Dufour S, Duband J-L, Humphries MJ, Obara M, Yamada KM, Thiery JP. 1988. Attachment, spreading, and locomotion of avian neural crest cells are mediated by multiple adhesion sites on fibronectin molecules. Embo J. 7(9): 2661-2671.
99. Humphries MJ, Akiyama SK, Komoriya A, Olden K, Yamada KM. 1988. Neurite extension of chicken peripheral nervous system neurons on fibronectin: Relative importance of specific adhesion sites in the central cell-binding domain and the alternatively spliced type III connecting segment. J Cell Biol. 106(4): 1289-1297.
100. Humphries MJ, Yamada KM, Olden K. 1988. Investigation of the biological effects of anti-cell adhesive synthetic peptides that inhibit experimental metastasis of B16-F10 murine melanoma cells. J Clin Invest. 81(3): 782-790.
101. Mueller SC, Hasegawa T, Yamada SS, Yamada KM, Chen W-T. 1988. Transmembrane orientation of the fibronectin receptor complex (integrin) demonstrated directly by a combination of immunocytochemical approaches. J Histochem Cytochem. 36(3): 297-306.

102. Nagata K, Hirayoshi K, Obara M, Saga S, Yamada KM. 1988. Biosynthesis of a novel transformation-sensitive heat-shock protein that binds to collagen. Regulation by mRNA levels and in vitro synthesis of a functional precursor. J Biol Chem. 263(17): 8344-8349.

103. Nagata K, Saga S, Yamada KM. 1988. Characterization of a novel transformation-sensitive heat-shock protein (HSP47) that binds to collagen. Biochem Biophys Res Commun. 153(1): 428-434.

104. Nermut MV, Green NM, Eason P, Yamada SS, Yamada KM. 1988. Electron microscopy and structural model of human fibronectin receptor. Embo J. 7(13): 4093-4099.

105. Nishida T, Nakagawa S, Watanabe K, Yamada KM, Otori T, Berman MB. 1988. A peptide from fibronectin cell-binding domain inhibits attachment of epithelial cells. Invest Ophthalmol Vis Sci. 29(12): 1820-1825.

106. Obara M, Kang MS, Yamada KM. 1988. Site-directed mutagenesis of the cell-binding domain of human fibronectin: Separable, synergistic sites mediate adhesive function. Cell. 53(4): 649-657.

107. Piotrowicz RS, Orchekowski RP, Nugent DJ, Yamada KY, Kunicki TJ. 1988. Glycoprotein Ic-IIa functions as an activation-independent fibronectin receptor on human platelets. J Cell Biol. 106(4): 1359-1364.

108. Roberts CJ, Birkenmeier TM, McQuillan JJ, Akiyama SK, Yamada SS, Chen W-T, Yamada KM, McDonald JA. 1988. Transforming growth factor beta stimulates the expression of fibronectin and of both subunits of the human fibronectin receptor by cultured human lung fibroblasts. J Biol Chem. 263(10): 4586-4592.

109. Saga S, Chen W-T, Yamada KM. 1988. Enhanced fibronectin receptor expression in Rous sarcoma virus-induced tumors. Cancer Res. 48(19): 5510-5513.

110. Akiyama SK, Yamada SS, Chen W-T, Yamada KM. 1989. Analysis of fibronectin receptor function with monoclonal antibodies: roles in cell adhesion, migration, matrix assembly, and cytoskeletal organization. J Cell Biol. 109(2): 863-875.

111. Akiyama SK, Yamada SS, Yamada KM. 1989. Analysis of the role of glycosylation of the human fibronectin receptor. J Biol Chem. 264(30): 18011-18018.

112. Izumi M, Yamada KM, Hayashi M. 1989. Vitronectin exists in two structurally and functionally distinct forms in human plasma. Biochim Biophys Acta. 990(2): 101-108.

113. Matsuyama T, Yamada A, Kay J, Yamada KM, Akiyama SK, Schlossman SF, Morimoto C. 1989. Activation of CD4 cells by fibronectin and anti-CD3 antibody. A synergistic effect mediated by the VLA-5 fibronectin receptor complex. J Exp Med. 170(4): 1133-1148.

114. Nakai A, Hirayoshi K, Saga S, Yamada KM, Nagata K. 1989. The transformation-sensitive heat shock protein (hsp47) binds specifically to Fetuin. Biochem Biophys Res Commun. 164(1): 259-264.

115. Peltonen J, Larjava H, Jaakkola S, Gralnick H, Akiyama SK, Yamada SS, Yamada KM, Uitto J. 1989. Localization of integrin receptors for fibronectin, collagen, and laminin in human skin. Variable expression in basal and squamous cell carcinomas. J Clin Invest. 84(6): 1916-1923.

116. Yamagata M, Suzuki S, Akiyama SK, Yamada KM, Kimata K. 1989. Regulation of cell-substrate adhesion by proteoglycans immobilized on extracellular substrates. J Biol Chem. 264(14): 8012-8018.

117. Akiyama SK, Larjava H, Yamada KM. 1990. Differences in the biosynthesis and localization of the fibronectin receptor in normal and transformed cultured human cells. Cancer Res. 50(5): 1601-1607.

118. Darribere T, Guida K, Larjava H, Johnson KE, Yamada KM, Thiery JP, Boucaut JC. 1990. In vivo analyses of integrin beta-1 subunit function in fibronectin matrix assembly. J Cell Biol. 110(5): 1813-1823.

119. Fogerty FJ, Akiyama SK, Yamada KM, Mosher DF. 1990. Inhibition of binding of fibronectin to matrix assembly sites by anti-integrin (alpha-5/beta-1) antibodies. J Cell Biol. 111(2): 699-708.

120. Larjava H, Peltonen J, Akiyama SK, Yamada SS, Gralnick HR, Uitto J, Yamada KM. 1990. Novel function for beta-1 integrins in keratinocyte cell-cell interactions. J Cell Biol. 110(3): 803-815.

121. Mills CL, Ariyo O, Yamada KM, Lash JW, Bellairs R. 1990. Evidence for the involvement of receptors for fibronectin in the promotion of chick tail segmentation. Anat Embryol. 182(5): 425-434.

122. Mould AP, Wheldon LA, Komoriya A, Wayner EA, Yamada KM, Humphries MJ. 1990. Affinity chromatographic isolation of the melanoma adhesion receptor for the IIICS region of fibronectin and its identification as the integrin alpha-4/beta-1. J Biol Chem. 265(7): 4020-4024.

123. Nojima Y, Humphries MJ, Mould AP, Komoriya A, Yamada KM, Schlossman SF, Morimoto C. 1990. VLA-4 mediates CD3-dependent CD4+ T cell activation via the CS1 alternatively spliced domain of fibronectin. J Exp Med. 172(4): 1185-1192.

124. Yamada KM, Kennedy DW, Yamada SS, Gralnick H, Chen W-T, Akiyama SK. 1990. Monoclonal antibody and synthetic peptide inhibitors of human tumor cell migration. Cancer Res. 50(15): 4485-4496.

125. Aota S, Nagai T, Yamada KM. 1991. Characterization of regions of fibronectin besides the arginine-glycine-aspartic acid sequence required for adhesive function of the cell-binding domain using site-directed mutagenesis. J Biol Chem. 266(24): 15938-15943.

126. Bowditch RD, Halloran CE, Aota S, Obara M, Plow EF, Yamada KM, Ginsberg MH. 1991. Integrin alpha IIb beta-3 (platelet GPIIb-IIIa) recognizes multiple sites in fibronectin. J Biol Chem. 266(34): 23323-23328.

127. Duband J-L, Dufour S, Yamada SS, Yamada KM, Thiery JP. 1991. Neural crest cell locomotion induced by antibodies to beta-1 integrins. A tool for studying the roles of substratum molecular avidity and density in migration. J Cell Sci. 98(Pt 4): 517-532.

128. Guo M, Kim LT, Akiyama SK, Gralnick HR, Yamada KM, Grinnell F. 1991. Altered processing of integrin receptors during keratinocyte activation. Exp Cell Res. 195(2): 315-322.

129. Hirayoshi K, Kudo H, Takechi H, Nakai A, Iwamatsu A, Yamada KM, Nagata K. 1991.

HSP47: A tissue-specific, transformation-sensitive, collagen-binding heat shock protein of chicken embryo fibroblasts. Mol Cell Biol. 11(8): 4036-4044.

130. Komoriya A, Green LJ, Mervic M, Yamada SS, Yamada KM, Humphries MJ. 1991. The minimal essential sequence for a major cell type-specific adhesion site (CS1) within the alternatively spliced type III connecting segment domain of fibronectin is leucine-aspartic acid-valine. J Biol Chem. 266(23): 15075-15079.

131. Mould AP, Komoriya A, Yamada KM, Humphries MJ. 1991. The CS5 peptide is a second site in the IIICS region of fibronectin recognized by the integrin alpha-4/beta-1. Inhibition of alpha-4/beta-1 function by RGD peptide homologues. J Biol Chem. 266(6): 3579-3585.

132. Nagai T, Yamakawa N, Aota S, Yamada SS, Akiyama SK, Olden K, Yamada KM. 1991. Monoclonal antibody characterization of two distant sites required for function of the central cell-binding domain of fibronectin in cell adhesion, cell migration, and matrix assembly. J Cell Biol. 114(6): 1295-1305.

133. Weeks BS, Klotman ME, Dhawan S, Kibbey M, Rappaport J, Kleinman HK, Yamada KM, Klotman PE. 1991. HIV-1 infection of human T lymphocytes results in enhanced alpha-5/beta-1 integrin expression. J Cell Biol. 114(4): 847-853.

134. Yamagata M, Yamada KM, Yamada SS, Shinomura T, Tanaka H, Nishida Y, Obara M, Kimata K. 1991. The complete primary structure of type XII collagen shows a chimeric molecule with reiterated fibronectin type III motifs, von Willebrand factor A motifs, a domain homologous to a noncollagenous region of type IX collagen, and short collagenous domains with an Arg-Gly-Asp site. J Cell Biol. 115(1): 209-221.

135. Darribere T, Koteliansky VE, Chernousov MA, Akiyama SK, Yamada KM, Thiery JP, Boucaut JC. 1992. Distinct regions of human fibronectin are essential for fibril assembly in an in vivo developing system. Dev Dyn. 194(1): 63-70.

136. Kim LT, Ishihara S, Lee CC, Akiyama SK, Yamada KM, Grinnell F. 1992. Altered glycosylation and cell surface expression of beta-1 integrin receptors during keratinocyte activation. J Cell Sci. 103(Pt 3): 743-753.

137. LaFlamme SE, Akiyama SK, Yamada KM. 1992. Regulation of fibronectin receptor distribution. J Cell Biol. 117(2): 437-447.

138. Thomas LA, Yamada KM. 1992. Contact stimulation of cell migration. J Cell Sci. 103(Pt 4): 1211-1214.

139. Braatz JA, Yasuda Y, Olden K, Yamada KM, Heifetz AH. 1993. Functional peptide-polyurethane conjugates with extended circulatory half-lives. Bioconjug Chem. 4(4): 262-267.

140. Dhawan S, Weeks BS, Abbasi F, Gralnick HR, Notkins AL, Klotman ME, Yamada KM, Klotman PE. 1993. Increased expression of alpha-4/beta-1 and alpha-5/beta-1 integrins on HTLV-I-infected lymphocytes. Virology. 197(2): 778-781.

141. Larjava H, Lyons JG, Salo T, Makela M, Koivisto L, Birkedal-Hansen H, Akiyama SK, Yamada KM, Heino J. 1993. Anti-integrin antibodies induce type IV collagenase expression in keratinocytes. J Cell Physiol. 157(1): 190-200.

142. Lee CC, Kozak CA, Yamada KM. 1993. Structure, genetic mapping, and expression of the

mouse Hgf/scatter factor gene. Cell Adhes Commun. 1(2): 101-111.

143. Alon R, Cahalon L, Hershkoviz R, Elbaz D, Reizis B, Wallach D, Akiyama SK, Yamada KM, Lider O. 1994. TNF-alpha binds to the N-terminal domain of fibronectin and augments the beta-1 integrin-mediated adhesion of CD4+ T lymphocytes to the glycoprotein. J Immunol. 152(3): 1304-1313.
144. Aota S, Nomizu M, Yamada KM. 1994. The short amino acid sequence Pro-His-Ser-Arg-Asn in human fibronectin enhances cell-adhesive function. J Biol Chem. 269(40): 24756-24761.
145. Bowditch RD, Hariharan M, Tominna EF, Smith JW, Yamada KM, Getzoff ED, Ginsberg MH. 1994. Identification of a novel integrin binding site in fibronectin. Differential utilization by beta-3 integrins. J Biol Chem. 269(14): 10856-10863.
146. Cahalon L, Hershkoviz R, Gilat D, Miller A, Akiyama SK, Yamada KM, Lider O. 1994. Functional interactions of fibronectin and TNF-alpha: A paradigm of physiological linkage between cytokines and extracellular matrix moieties. Cell Adhes Commun. 2(3): 269-273.
147. Chen Y-P, O'Toole TE, Shipley T, Forsyth J, LaFlamme SE, Yamada KM, Shattil SJ, Ginsberg MH. 1994. "Inside-out" signal transduction inhibited by isolated integrin cytoplasmic domains. J Biol Chem. 269(28): 18307-18310.
148. Hershkoviz R, Cahalon L, Miron S, Alon R, Sapir T, Akiyama SK, Yamada KM, Lider O. 1994. TNF-alpha associated with fibronectin enhances phorbol myristate acetate- or antigen-mediated integrin-dependent adhesion of CD4+ T cells via protein tyrosine phosphorylation. J Immunol. 153(2): 554-565.
149. LaFlamme SE, Thomas LA, Yamada SS, Yamada KM. 1994. Single subunit chimeric integrins as mimics and inhibitors of endogenous integrin functions in receptor localization, cell spreading and migration, and matrix assembly. J Cell Biol. 126(5): 1287-1298.
150. Lee CC, Yamada KM. 1994. Identification of a novel type of alternative splicing of a tyrosine kinase receptor. Juxtamembrane deletion of the c-met protein kinase C serine phosphorylation regulatory site. J Biol Chem. 269(30): 19457-19461.
151. Savagner P, Valles AM, Jouanneau J, Yamada KM, Thiery JP. 1994. Alternative splicing in fibroblast growth factor receptor 2 is associated with induced epithelial-mesenchymal transition in rat bladder carcinoma cells. Mol Biol Cell. 5(8): 851-862.
152. Yamada S, Yamada KM, Brown KE. 1994. Integrin regulatory switching in development: Oscillation of beta-5 integrin mRNA expression during epithelial-mesenchymal interactions in tooth development. Int J Dev Biol. 38(3): 553-556.
153. Akiyama SK, Aota S, Yamada KM. 1995. Function and receptor specificity of a minimal 20-kDa cell adhesive fragment of fibronectin. Cell Adhes Commun. 3(1): 13-25.
154. Bellairs R, Lear P, Yamada KM, Rutishauser U, Lash JW. 1995. Posterior extension of the chick nephric (Wolffian) duct: The role of fibronectin and NCAM polysialic acid. Dev Dyn. 202(4): 333-342.
155. Burbelo PD, Miyamoto S, Utani A, Brill S, Yamada KM, Hall A, Yamada Y. 1995. p190-

B, a new member of the Rho GAP family, and Rho are induced to cluster after integrin cross-linking. J Biol Chem. 270(52): 30919-30926.

156. Danen EH, Aota S, van Kraats AA, Yamada KM, Ruiter DJ, van Muijen GN. 1995. Requirement for the synergy site for cell adhesion to fibronectin depends on the activation state of integrin alpha-5/beta-1. J Biol Chem. 270(37): 21612-21618.

157. Dhawan S, Weeks BS, Soderland C, Schnaper HW, Toro LA, Asthana SP, Hewlett IK, Stetler-Stevenson WG, Yamada SS, Yamada KM, Meltzer MS. 1995. HIV-1 infection alters monocyte interactions with human microvascular endothelial cells. J Immunol. 154(1): 422-432.

158. Donaldson DJ, Mahan JT, Yang H, Yamada KM. 1995. Integrin and phosphotyrosine expression in normal and migrating newt keratinocytes. Anat Rec. 241(1): 49-58.

159. Haapasalmi K, Makela M, Oksala O, Heino J, Yamada KM, Uitto VJ, Larjava H. 1995. Expression of epithelial adhesion proteins and integrins in chronic inflammation. Am J Pathol. 147(1): 193-206.

160. Lash JW, Yamada KM, Bellairs R. 1995. Cell surface alterations in embryonic tissues exposed to RGD-peptides: Selective expression. Int J Dev Biol. 39(6): 933-938.

161. Lee CC, Yamada KM. 1995. Alternatively spliced juxtamembrane domain of a tyrosine kinase receptor is a multifunctional regulatory site. Deletion alters cellular tyrosine phosphorylation pattern and facilitates binding of phosphatidylinositol-3-OH kinase to the hepatocyte growth factor receptor. J Biol Chem. 270(2): 507-510.

162. Matsuki Y, Nakashima M, Amizuka N, Warshawsky H, Goltzman D, Yamada KM, Yamada Y. 1995. A compilation of partial sequences of randomly selected cDNA clones from the rat incisor. J Dent Res. 74(1): 307-312.

163. Miyamoto S, Akiyama SK, Yamada KM. 1995. Synergistic roles for receptor occupancy and aggregation in integrin transmembrane function. Science. 267(5199): 883-885.

164. Miyamoto S, Teramoto H, Coso OA, Gutkind JS, Burbelo PD, Akiyama SK, Yamada KM. 1995. Integrin function: Molecular hierarchies of cytoskeletal and signaling molecules. J Cell Biol. 131(3): 791-805.

165. Newton SA, Reeves EJ, Gralnick H, Mohla S, Yamada KM, Olden K, Akiyama SK. 1995. Inhibition of experimental metastasis of human breast carcinoma cells in athymic nude mice by anti-alpha-5/beta-1 fibronectin receptor integrin antibodies. Int J Oncol. 6: 1063-1070.

166. Yamada S, Brown KE, Yamada KM. 1995. Differential mRNA regulation of integrin subunits alpha-V, beta-1, beta-3, and beta-5 during mouse embryonic organogenesis. Cell Adhes Commun. 3(4): 311-325.

167. Krebsbach PH, Lee SK, Matsuki Y, Kozak CA, Yamada KM, Yamada Y. 1996. Full-length sequence, localization, and chromosomal mapping of ameloblastin. A novel tooth-specific gene. J Biol Chem. 271(8): 4431-4435.Lafrenie RM, Wahl LM, Epstein JS, Hewlett IK, Yamada KM, Dhawan S. 1996. HIV-1-Tat protein promotes chemotaxis and invasive behavior by monocytes. J Immunol. 157(3): 974-977.

168. Lafrenie RM, Wahl LM, Epstein JS, Hewlett IK, Yamada KM, Dhawan S. 1996. HIV-1-

Tat modulates the function of monocytes and alters their interactions with microvessel endothelial cells. A mechanism of HIV pathogenesis. J Immunol. 156(4): 1638-1645.

169. Lee SK, Krebsbach PH, Matsuki Y, Nanci A, Yamada KM, Yamada Y. 1996. Ameloblastin expression in rat incisors and human tooth germs. Int J Dev Biol. 40(6): 1141-1150.

170. Miyamoto S, Teramoto H, Gutkind JS, Yamada KM. 1996. Integrins can collaborate with growth factors for phosphorylation of receptor tyrosine kinases and MAP kinase activation: Roles of integrin aggregation and occupancy of receptors. J Cell Biol. 135(6 Pt 1): 1633-1642.

171. Ozeri V, Tovi A, Burstein I, Natanson-Yaron S, Caparon MG, Yamada KM, Akiyama SK, Vlodavsky I, Hanski E. 1996. A two-domain mechanism for group A streptococcal adherence through protein F to the extracellular matrix. Embo J. 15(5): 989-998.

172. Ariel A, Hershkoviz R, Cahalon L, Williams DE, Akiyama SK, Yamada KM, Chen C, Alon R, Lapidot T, Lider O. 1997. Induction of T cell adhesion to extracellular matrix or endothelial cell ligands by soluble or matrix-bound interleukin-7. Eur J Immunol. 27(10): 2562-2570.

173. Kim LT, Yamada KM. 1997. Evidence that beta-1 integrins in keratinocyte cell-cell junctions are not in the ligand-occupied conformation. J Invest Dermatol. 108(6): 876-880.

174. Lafrenie RM, Wahl LM, Epstein JS, Yamada KM, Dhawan S. 1997. Activation of monocytes by HIV-Tat treatment is mediated by cytokine expression. J Immunol. 159(8): 4077-4083.

175. Mould AP, Askari JA, Aota S, Yamada KM, Irie A, Takada Y, Mardon HJ, Humphries MJ. 1997. Defining the topology of integrin alpha-5/beta-1-fibronectin interactions using inhibitory anti-alpha-5 and anti-beta-1 monoclonal antibodies. Evidence that the synergy sequence of fibronectin is recognized by the amino-terminal repeats of the alpha-5 subunit. J Biol Chem. 272(28): 17283-17292.

176. Savagner P, Yamada KM, Thiery JP. 1997. The zinc-finger protein slug causes desmosome dissociation, an initial and necessary step for growth factor-induced epithelial-mesenchymal transition. J Cell Biol. 137(6): 1403-1419.

177. Wu AJ, Lafrenie RM, Park C, Apinhasmit W, Chen ZJ, Birkedal-Hansen H, Yamada KM, Stetler-Stevenson WG, Baum BJ. 1997. Modulation of MMP-2 (gelatinase A) and MMP-9 (gelatinase B) by interferon-gamma in a human salivary gland cell line. J Cell Physiol. 171(2): 117-124.

178. Copie V, Tomita Y, Akiyama SK, Aota S, Yamada KM, Venable RM, Pastor RW, Krueger S, Torchia DA. 1998. Solution structure and dynamics of linked cell attachment modules of mouse fibronectin containing the RGD and synergy regions: Comparison with the human fibronectin crystal structure. J Mol Biol. 277(3): 663-682.

179. Gu J, Tamura M, Yamada KM. 1998. Tumor suppressor PTEN inhibits integrin- and growth factor-mediated mitogen-activated protein (MAP) kinase signaling pathways. J Cell Biol. 143(5): 1375-1383.

180. Katz B-Z, Krylov D, Aota S, Olive M, Vinson C, Yamada KM. 1998. Green fluorescent protein labeling of cytoskeletal structures—Novel targeting approach based on leucine zippers. Biotechniques. 25(2): 298-302, 304.

181. Katz B-Z, Levenberg S, Yamada KM, Geiger B. 1998. Modulation of cell-cell adherens junctions by surface clustering of the N-cadherin cytoplasmic tail. Exp Cell Res. 243(2): 415-424.

182. Lafrenie RM, Bernier SM, Yamada KM. 1998. Adhesion to fibronectin or collagen I gel induces rapid, extensive, biosynthetic alterations in epithelial cells. J Cell Physiol. 175(2): 163-173.

183. Levenberg S, Katz B-Z, Yamada KM, Geiger B. 1998. Long-range and selective autoregulation of cell-cell or cell-matrix adhesions by cadherin or integrin ligands. J Cell Sci. 111(Pt 3): 347-357.

184. Savagner P, Karavanova I, Perantoni A, Thiery JP, Yamada KM. 1998. Slug mRNA is expressed by specific mesodermal derivatives during rodent organogenesis. Dev Dyn. 213(2): 182-187.

185. Stanton H, Gavrilovic J, Atkinson SJ, d'Ortho MP, Yamada KM, Zardi L, Murphy G. 1998. The activation of ProMMP-2 (gelatinase A) by HT1080 fibrosarcoma cells is promoted by culture on a fibronectin substrate and is concomitant with an increase in processing of MT1-MMP (MMP-14) to a 45-kDa form. J Cell Sci. 111(Pt 18): 2789-2798.

186. Tamura M, Gu J, Matsumoto K, Aota S, Parsons R, Yamada KM. 1998. Inhibition of cell migration, spreading, and focal adhesions by tumor suppressor PTEN. Science. 280(5369): 1614-1617.

187. Zohar M, Teramoto H, Katz B-Z, Yamada KM, Gutkind JS. 1998. Effector domain mutants of Rho dissociate cytoskeletal changes from nuclear signaling and cellular transformation. Oncogene. 17(8): 991-998.

188. Akamatsu M, Aota S, Suwa A, Ueda K, Amachi T, Yamada KM, Akiyama SK, Kioka N. 1999. Vinexin forms a signaling complex with Sos and modulates epidermal growth factor-induced c-Jun N-terminal kinase/stress-activated protein kinase activities. J Biol Chem. 274(50): 35933-35937.

189. Boykins RA, Mahieux R, Shankavaram UT, Gho YS, Lee SF, Hewlett IK, Wahl LM, Kleinman HK, Brady JN, Yamada KM, Dhawan S. 1999. Cutting edge: A short polypeptide domain of HIV-1-Tat protein mediates pathogenesis. J Immunol. 163(1): 15-20.

190. De Nichilo MO, Katz B-Z, O'Connell B, Yamada KM. 1999. De novo expression of pp125FAK in human macrophages regulates CSK distribution and MAP kinase activation but does not affect focal contact structure. J Cell Physiol. 178(2): 164-172.

191. Gu J, Tamura M, Pankov R, Danen EH, Takino T, Matsumoto K, Yamada KM. 1999. Shc and FAK differentially regulate cell motility and directionality modulated by PTEN. J Cell Biol. 146(2): 389-403.

192. Igishi T, Fukuhara S, Patel V, Katz B-Z, Yamada KM, Gutkind JS. 1999. Divergent signaling pathways link focal adhesion kinase to mitogen-activated protein kinase

cascades. Evidence for a role of paxillin in c-Jun NH(2)-terminal kinase activation. J Biol Chem. 274(43): 30738-30746.

193. Kioka N, Sakata S, Kawauchi T, Amachi T, Akiyama SK, Okazaki K, Yaen C, Yamada KM, Aota S. 1999. Vinexin: A novel vinculin-binding protein with multiple SH3 domains enhances actin cytoskeletal organization. J Cell Biol. 144(1): 59-69.

194. Nath D, Slocombe PM, Stephens PE, Warn A, Hutchinson GR, Yamada KM, Docherty AJ, Murphy G. 1999. Interaction of metargidin (ADAM-15) with alpha-v/beta-3 and alpha-5/beta-1 integrins on different haemopoietic cells. J Cell Sci. 112(Pt 4): 579-587.

195. Podsypanina K, Ellenson LH, Nemes A, Gu J, Tamura M, Yamada KM, Cordon-Cardo C, Catoretti G, Fisher PE, Parsons R. 1999. Mutation of Pten/Mmac1 in mice causes neoplasia in multiple organ systems. Proc Natl Acad Sci U S A. 96(4): 1563-1568.

196. Tamura M, Gu J, Danen EH, Takino T, Miyamoto S, Yamada KM. 1999. PTEN interactions with focal adhesion kinase and suppression of the extracellular matrix-dependent phosphatidylinositol 3-kinase/Akt cell survival pathway. J Biol Chem. 274(29): 20693-20703.

197. Tamura M, Gu J, Takino T, Yamada KM. 1999. Tumor suppressor PTEN inhibition of cell invasion, migration, and growth: Differential involvement of focal adhesion kinase and $p130^{Cas}$. Cancer Res. 59(2): 442-449.

198. Wang S, Cukierman E, Swaim WD, Yamada KM, Baum BJ. 1999. Extracellular matrix protein-induced changes in human salivary epithelial cell organization and proliferation on a model biological substratum. Biomaterials. 20(11): 1043-1049.

199. Yin Z, Giacomello E, Gabriele E, Zardi L, Aota S, Yamada KM, Skerlavaji B, Doliana R, Colombatti A, Perris R. 1999. Cooperative activity of alpha-4/beta-1 and alpha-4/beta-7 integrins in mediating human B-cell lymphoma adhesion and chemotaxis on fibronectin through recognition of multiple synergizing binding sites within the central cell-binding domain. Blood. 93(4): 1221-1230.

200. Aframian DJ, Cukierman E, Nikolovski J, Mooney DJ, Yamada KM, Baum BJ. 2000. The growth and morphological behavior of salivary epithelial cells on matrix protein-coated biodegradable substrata. Tissue Eng. 6(3): 209-216.

201. Boykins RA, Ardans JA, Wahl LM, Lal RB, Yamada KM, Dhawan S. 2000. Immunization with a novel HIV-1-Tat multiple-peptide conjugate induces effective immune response in mice. Peptides. 21(12): 1839-1847.

202. Danen EH, Sonneveld P, Sonnenberg A, Yamada KM. 2000. Dual stimulation of Ras/mitogen-activated protein kinase and RhoA by cell adhesion to fibronectin supports growth factor-stimulated cell cycle progression. J Cell Biol. 151(7): 1413-1422.

203. Katz B-Z, Zamir E, Bershadsky A, Kam Z, Yamada KM, Geiger B. 2000. Physical state of the extracellular matrix regulates the structure and molecular composition of cell-matrix adhesions. Mol Biol Cell. 11(3): 1047-1060.

204. Katz B-Z, Zohar M, Teramoto H, Matsumoto K, Gutkind JS, Lin DC, Lin S, Yamada KM. 2000. Tensin can induce JNK and p38 activation. Biochem Biophys Res Commun. 272(3): 717-720.

205. Pankov R, Cukierman E, Katz B-Z, Matsumoto K, Lin DC, Lin S, Hahn C, Yamada KM. 2000. Integrin dynamics and matrix assembly: Tensin-dependent translocation of alpha-5/beta-1 integrins promotes early fibronectin fibrillogenesis. J Cell Biol. 148(5): 1075-1090.
206. Tamura M, Yanagihara N, Tanaka H, Osajima A, Hirano T, Higashi K, Yamada KM, Nakashima Y, Hirano H. 2000. Activation of DNA synthesis and AP-1 by profilin, an actin-binding protein, via binding to a cell surface receptor in cultured rat mesangial cells. J Am Soc Nephrol. 11(9): 1620-1630.
207. Zamir E, Katz M, Posen Y, Erez N, Yamada KM, Katz B-Z, Lin S, Lin DC, Bershadsky A, Kam Z, Geiger B. 2000. Dynamics and segregation of cell-matrix adhesions in cultured fibroblasts. Nat Cell Biol. 2(4): 191-196.
208. Aframian DJ, Zheng C, Goldsmith CM, Nikolovski J, Cukierman E, Yamada KM, Mooney DJ, Birkedal-Hansen H, Baum BJ. 2001. Using HSV-thymidine kinase for safety in an allogeneic salivary graft cell line. Tissue Eng. 7(4): 405-413.
209. Brown MJ, Hallam JA, Liu Y, Yamada KM, Shaw S. 2001. Cutting Edge: Integration of human T lymphocyte cytoskeleton by the cytolinker plectin. J Immunol. 167(2): 641-645.
210. Cukierman E, Pankov R, Stevens DR, Yamada KM. 2001. Taking cell-matrix adhesions to the third dimension. Science. 294(5547): 1708-1712.
211. Lam K, Zhang L, Yamada KM, Lafrenie RM. 2001. Adhesion of epithelial cells to fibronectin or collagen I induces alterations in gene expression via a protein kinase C-dependent mechanism. J Cell Physiol. 189(1): 79-90.
212. Yamada KM, Araki M. 2001. Tumor suppressor PTEN: Modulator of cell signaling, growth, migration, and apoptosis. J Cell Sci. 114: 2375-2382.
213. Aframian DJ, Redman RS, Yamano S, Nikolovski J, Cukierman E, Yamada KM, Kriete MF, Swaim WD, Mooney DJ, Baum BJ. 2002. Tissue compatibility of two biodegradable tubular scaffolds implanted adjacent to skin or buccal mucosa in mice. Tissue Eng. 8(4): 649-659.
214. Aframian DJ, Tran SD, Cukierman E, Yamada KM, Baum BJ. 2002. Absence of tight junction formation in an allogeneic graft cell line used for developing an engineered artificial salivary gland. Tissue Eng. 8(5): 871-878.
215. Choung PH, Seo BM, Chung CP, Yamada KM, Jang JH. 2002. Synergistic activity of fibronectin and fibroblast growth factor receptors on neuronal adhesion and neurite extension through extracellular signal-regulated kinase pathway. Biochem Biophys Res Commun. 295(4): 898-902.
216. Galbraith CG, Yamada KM, Sheetz MP. 2002. The relationship between force and focal complex development. J Cell Biol. 159(4): 695-705.
217. Gu J, Fujibayashi A, Yamada KM, Sekiguchi K. 2002. Laminin-10/11 and fibronectin differentially prevent apoptosis induced by serum removal via phosphatidylinositol 3-kinase/Akt- and MEK1/ERK-dependent pathways. J Biol Chem. 277(22): 19922-19928.
218. Katz B-Z, Miyamoto S, Teramoto H, Zohar M, Krylov D, Vinson C, Gutkind JS, Yamada KM. 2002. Direct transmembrane clustering and cytoplasmic dimerization of focal

adhesion kinase initiates its tyrosine phosphorylation. Biochim Biophys Acta. 1592(2): 141-152.

219. Kee SH, Jang SI, Ahvazi B, Larsen M, Yamada KM, Steinert PM. 2002. Cell-cell adhesion and RhoA-mediated actin polymerization are independent phenomena in microtubule disrupted keratinocytes. J Invest Dermatol. 119(2): 440-448.

220. Lafrenie RM, Lee SF, Hewlett IK, Yamada KM, Dhawan S. 2002. Involvement of integrin alpha-v/beta-3 in the pathogenesis of human immunodeficiency virus type 1 infection in monocytes. Virology. 297(1): 31-38.

221. Takino T, Yoshioka K, Miyamori H, Yamada KM, Sato H. 2002. A scaffold protein in the c-Jun N-terminal kinase signaling pathway is associated with focal adhesion kinase and tyrosine-phosphorylated. Oncogene. 21(42): 6488-6497.

222. Tran H, Pankov R, Tran SD, Hampton B, Burgess WH, Yamada KM. 2002. Integrin clustering induces kinectin accumulation. J Cell Sci. 115(Pt 10): 2031-2040.

223. Brown MJ, Nijhara R, Hallam JA, Gignac M, Yamada KM, Erlandsen SL, Delon J, Kruhlak M, Shaw S. 2003. Chemokine stimulation of human peripheral blood T lymphocytes induces rapid dephosphorylation of ERM proteins, which facilitates loss of microvilli and polarization. Blood. 102(12): 3890-3899.

224. Engelholm LH, List K, Netzel-Arnett S, Cukierman E, Mitola DJ, Aaronson H, Kjøller L, Larsen JK, Yamada KM, Strickland DK, Holmbeck K, Danø K, Birkedal-Hansen H, Behrendt N, Bugge TH. 2003. uPARAP/Endo180 is essential for cellular uptake of collagen and promotes fibroblast collagen adhesion. J Cell Biol. 160(7): 1009-1015.

225. Katz B-Z, Romer L, Miyamoto S, Volberg T, Matsumoto K, Cukierman E, Geiger B, Yamada KM. 2003. Targeting membrane-localized focal adhesion kinase to focal adhesions: roles of tyrosine phosphorylation and SRC family kinases. J Biol Chem. 278(31): 29115-29120.

226. Larsen M, Hoffman MP, Sakai T, Neibaur JC, Mitchell JM, Yamada KM. 2003. Role of PI 3-kinase and PIP3 in submandibular gland branching morphogenesis. Dev Biol. 255(1): 178-191.

227. Lee SK, Kim SM, Lee YJ, Yamada KM, Yamada Y, Chi JG. 2003. The structure of the rat ameloblastin gene and its expression in amelogenesis. Mol Cells. 15(2): 216-225.

228. Pankov R, Cukierman E, Clark K, Matsumoto K, Hahn C, Poulin B, Yamada KM. 2003. Specific beta-1 integrin site selectively regulates Akt/protein kinase B signaling via local activation of protein phosphatase 2A. J Biol Chem. 278(20): 18671-18681.

229. Sakai T, Larsen M, Yamada KM. 2003. Fibronectin requirement in branching morphogenesis. Nature. 423(6942): 876-881.

230. Takino T, Nakada M, Miyamori H, Yamashita J, Yamada KM, Sato H. 2003. CrkI adapter protein modulates cell migration and invasion in glioblastoma. Cancer Res. 63(9): 2335-2337.

231. Takino T, Tamura M, Miyamori H, Araki M, Matsumoto K, Sato H, Yamada KM. 2003. Tyrosine phosphorylation of the CrkII adaptor protein modulates cell migration. J Cell Sci. 116(Pt 15): 3145-3155.

232. Tran SD, Pillemer SR, Dutra A, Barrett AJ, Brownstein MJ, Key S, Pak E, Leakan RA, Kingman A, Yamada KM, Baum BJ, Mezey E. 2003. Differentiation of human bone marrow-derived cells into buccal epithelial cells in vivo: A molecular analytical study. Lancet. 361(9363): 1084-1088.

233. Zajaczkowski MB, Cukierman E, Galbraith CG, Yamada KM. 2003. Cell-matrix adhesions on poly(vinyl alcohol) hydrogels. Tissue Eng. 9(3): 525-533.

234. Conti MA, Even-Ram S, Liu C, Yamada KM, Adelstein RS. 2004. Defects in cell adhesion and the visceral endoderm following ablation of nonmuscle myosin heavy chain II-A in mice. J Biol Chem. 279(40): 41263-41266.

235. Devadas K, Hardegen NJ, Wahl LM, Hewlett IK, Clouse KA, Yamada KM, Dhawan S. 2004. Mechanisms for macrophage-mediated HIV-1 induction. J Immunol. 173(11): 6735-6744.

236. Koivisto L, Hakkinen L, Matsumoto K, McCulloch CA, Yamada KM, Larjava H. 2004. Glycogen synthase kinase-3 regulates cytoskeleton and translocation of Rac1 in long cellular extensions of human keratinocytes. Exp Cell Res. 293(1): 68-80.

237. Nakamura T, Unda F, de-Vega S, Vilaxa A, Fukumoto S, Yamada KM, Yamada Y. 2004. The Krüppel-like factor epiprofin is expressed by epithelium of developing teeth, hair follicles, and limb buds and promotes cell proliferation. J Biol Chem. 279(1): 626-634.

238. Washburn NR, Yamada KM, Simon CG, Jr., Kennedy SB, Amis EJ. 2004. High-throughput investigation of osteoblast response to polymer crystallinity: Influence of nanometer-scale roughness on proliferation. Biomaterials. 25(7-8): 1215-1224.

239. Clark K, Pankov R, Travis MA, Askari JA, Mould AP, Craig SE, Newham P, Yamada KM, Humphries MJ. 2005. A specific alpha-5/beta-1-integrin conformation promotes directional integrin translocation and fibronectin matrix formation. J Cell Sci. 118(Pt 2): 291-300.

240. De Langhe SP, Sala FG, Del Moral PM, Fairbanks TJ, Yamada KM, Warburton D, Burns RC, Bellusci S. 2005. Dickkopf-1 (DKK1) reveals that fibronectin is a major target of Wnt signaling in branching morphogenesis of the mouse embryonic lung. Dev Biol. 277(2): 316-331.

241. Pankov R, Endo Y, Even-Ram S, Araki M, Clark K, Cukierman E, Matsumoto K, Yamada KM. 2005. A Rac switch regulates random versus directionally persistent cell migration. J Cell Biol. 170(5): 793-802.

242. Segarra M, Vilardell C, Matsumoto K, Esparza J, Lozano E, Serra-Pages C, Urbano-Marquez A, Yamada KM, Cid MC. 2005. Dual function of focal adhesion kinase in regulating integrin-induced MMP-2 and MMP-9 release by human T lymphoid cells. FASEB J. 19(13): 1875-1877.

243. Takino T, Nakada M, Miyamori H, Watanabe Y, Sato T, Gantulga D, Yoshioka K, Yamada KM, Sato H. 2005. JSAP1/JIP3 cooperates with focal adhesion kinase to regulate c-Jun N-terminal kinase and cell migration. J Biol Chem. 280(45): 37772-37781.

244. Artym VV, Zhang Y, Seillier-Moiseiwitsch F, Yamada KM, Mueller SC. 2006. Dynamic interactions of cortactin and membrane type 1 matrix metalloproteinase at invadopodia:

defining the stages of invadopodia formation and function. Cancer Res. 66(6): 3034-3043.

245. Bowden ET, Onikoyi E, Slack R, Myoui A, Yoneda T, Yamada KM, Mueller SC. 2006. Co-localization of cortactin and phosphotyrosine identifies active invadopodia in human breast cancer cells. Exp Cell Res. 312(8): 1240-1253.

246. Devadas K, Boykins RA, Hardegen NJ, Philp D, Kleinman HK, Osa EO, Wang J, Clouse KA, Wahl LM, Hewlett IK, Rappaport J, Yamada KM, Dhawan S. 2006. Selective side-chain modification of cysteine and arginine residues blocks pathogenic activity of HIV-1-Tat functional peptides. Peptides. 27(4): 611-621.

247. Larsen M, Wei C, Yamada KM. 2006. Cell and fibronectin dynamics during branching morphogenesis. J Cell Sci. 119(16): 3376-3384.

248. Bharti S, Inoue H, Bharti K, Hirsch DS, Nie Z, Yoon HY, Artym V, Yamada KM, Mueller SC, Barr VA, Randazzo PA. 2007. Src-dependent phosphorylation of ASAP1 regulates podosomes. Mol Cell Biol. 27(23): 8271-8283.

249. Galbraith CG, Yamada KM, Galbraith JA. 2007. Polymerizing actin fibers position integrins primed to probe for adhesion sites. Science 315(5814): 992-995.

250. Devadas K, Boykins RA, Hewlett IK, Wood OL, Clouse KA, Yamada KM, Dhawan S. 2007. Antibodies against a multiple-peptide conjugate comprising chemically modified human immunodeficiency virus type-1 functional Tat peptides inhibit infection. Peptides. 28(3): 496-504.

251. Even-Ram S, Doyle AD, Conti MA, Matsumoto K, Adelstein RS, Yamada KM. 2007. Myosin IIA regulates cell motility and actomyosin-microtubule crosstalk. Nat Cell Biol. 9(3): 299-309.

252. Qian X, Li G, Asmussen HK, Asnaghi L, Vass WC, Braverman R, Yamada KM, Popescu NC, Papageorge AG, Lowy DR. 2007. Oncogenic inhibition by a deleted in liver cancer gene requires cooperation between tensin binding and Rho-specific GTPase-activating protein activities. Proc Natl Acad Sci U S A. 104(21): 9012-9017.

253. Wei C, Larsen M, Hoffman MP, Yamada KM. 2007. Self-organization and branching morphogenesis of primary salivary epithelial cells. Tissue Eng. 13(4): 721-735.

254. Sameni M, Dosescu J, Yamada KM, Sloane BF, Cavallo-Medved D. 2008. Functional live-cell imaging demonstrates that β1 integrin promotes type IV collagen degradation by breast and prostate cancer cells. Mol. Imaging 7(5): 199-213.

255. Packard BZ, Artym VV, Komoriya A, Yamada KM. Direct visualization of protease activity on cells migrating in three-dimensions. 2009. Matrix Biol. 28(1): 3-10.

256. Green JA, Berrier AL, Pankov R, Yamada KM. 2009. β1 integrin cytoplasmic domain residues selectively modulate fibronectin matrix assembly and cell spreading through talin and Akt-1. J. Biol. Chem. 284: 8148-8159.

257. Doyle AD, Wang FW, Matsumoto K, Yamada KM. 2009. One-dimensional topography underlies three-dimensional fibrillar cell migration. J. Cell Biol. 184: 481-490.

258. Clark K, Howe JD, Pullar CE, Green JA, Artym VV, Yamada KM, Critchley DR. 2010. Tensin 2 modulates cell contractility in 3D collagen gels through the RhoGAP DLC1. J

Cell Biochem 109: 808-817.

259. Onodera T, Sakai T, Hsu JC, Matsumoto K, Chiorini JA, Yamada KM. 2010. Btbd7 regulates epithelial cell dynamics and branching morphogenesis. Science 329: 562-565.

260. Hakkinen KM, Harunaga JS, Doyle AD, Yamada KM. 2011. Direct comparisons of the morphology, migration, cell adhesions, and actin cytoskeleton of fibroblasts in four different three-dimensional extracellular matrices. Tissue Eng Part A 17: 713-724.

261. Artym VV, Matsumoto K, Mueller SC, Yamada KM. 2011. Dynamic membrane remodeling at invadopodia differentiates invadopodia from podosomes. Eur J Cell Biol 90: 172-180.

262. Sansing HA, Sarkeshik A, Yates JR, Patel V, Gutkind JS, Yamada KM, Berrier AL. 2011. Integrin αβ1, αvβ, α6β effectors p130Cas, Src and talin regulate carcinoma invasion and chemoresistance. Biochem Biophys Res Commun. 406: 171-176.

263. Musselmann K, Green JA, Sone K, Hsu JC, Bothwell I, Johnson SA, Harunaga J, Wei J, Yamada KM. 2011. Salivary gland gene expression atlas identifies a new regulator of branching morphogenesis. J Dent Res. 90: 1078-1084.

264. Hsu JC, Di Pasquale G, Harunaga JS, Onodera T, Hoffman MP, Chiorini JA, Yamada KM. 2011. Viral gene transfer to developing mouse salivary glands. J Dent Res., in press.

Peer-reviewed review articles

1. Wessells NK, Spooner BS, Ash JF, Bradley MO, Luduena MA, Taylor EL, Wrenn JT, Yamada KM. 1971. Microfilaments in cellular and developmental processes. Science. 171: 135-143.

2. Akiyama SK, Nagata K, Yamada KM. 1990. Cell surface receptors for extracellular matrix components. Biochim Biophys Acta. 1031(1): 91-110.

3. Geiger B, Bershadsky A, Pankov R, Yamada KM. 2001. Transmembrane cross-talk between the extracellular matrix and the cytoskeleton. Nat Rev Mol Cell Biol. 2(11): 793-805.

4. Larsen M, Tremblay M, Yamada KM. 2003. Phosphatases in cell-matrix adhesion and migration. Nat Rev Mol Cell Biol. 4: 700-711.

5. Yamada KM, Cukierman E. 2007. Modeling tissue morphogenesis and cancer in 3D. Cell. 130(4): 601-610.

6. Petrie RJ, Doyle AD, Yamada KM. 2009. Random versus directionally persistent cell migration. Nat Rev Mol Cell Biol. 10: 538-549.

7. Hsu JC, Yamada KM. 2010. Salivary gland branching morphogenesis--recent progress and future opportunities. Int J Oral Sci. 2: 117-126.

8. Larsen M, Yamada KM, Musselmann K. 2010. Systems analysis of salivary gland development and disease. Wiley Interdiscip Rev Syst Biol Med. 2: 670-682.

9. Harunaga J, Hsu JC, Yamada KM. 2011. Dynamics of salivary gland morphogenesis. J Dent Res 90: 1070-1077.

10. Harunaga JS, Yamada KM. 2011. Cell-matrix adhesions in 3D. Matrix Biol. 30: 363-368.

Invited (not peer-reviewed) review articles

1. Yamada KM. 1975. Book Review: Readings in Mammalian Cell Culture. Edited by R Pollack. Quart Rev Biol. 50: 78-79.
2. Yamada KM, Pastan I. 1976. Cell surface protein and neoplastic transformation. Trends Biochem Sci. 1: 222-224.
3. Yamada KM. 1978. Cell surface marker for malignancy (News and Views). Nature. 273(5661): 335-336.
4. Yamada KM, Olden K. 1978. Fibronectins—Adhesive glycoproteins of cell surface and blood. Nature. 275(5677): 179-184.
5. Yamada KM, Pouyssegur J. 1978. Cell surface glycoproteins and malignant transformation. Biochimie. 60(11-12): 1221-1233.
6. Yamada KM. 1979. Fibronectins: Adhesive glycoproteins of membranes and blood. Japan Medical Tribune. 2: 25-28.
7. Yamada KM. 1980. Cell-surface fibronectin (Photoessay). J Am Med Assoc. 244(2): 179.
8. Yamada KM. 1980. Fibronectin: Transformation-sensitive cell surface protein. Lymphokine Reports. 1: 231-254.
9. Yamada KM, Hayashi M. 1981. Fibronectin (In Japanese). Kagaku. 51: 762-768.
10. Hynes RO, Yamada KM. 1982. Fibronectins: multifunctional modular glycoproteins. J Cell Biol. 95(2 Pt 1): 369-377.
11. Yamada KM. 1982. Isolation of fibronectin from plasma and cells. In: Immunochemistry of the Extracellular Matrix. Edited by J Furthmayr. Boca Raton, Florida: CRC Press. p. 111-123.
12. Yamada KM, Olden K. 1982. Actions of tunicamycin on vertebrate cells. In: Tunicamycin. Edited by G Tamura. Tokyo: Japan Scientific Societies Press. p. 119-144.
13. Akiyama SK, Yamada KM. 1983. Fibronectin and disease. In: Connective Tissue and Diseases of Connective Tissue. Edited by B Wagner, R Fleischmajer. Baltimore, MD: Williams and Wilkins. p. 55-96.
14. Yamada KM. 1983. Cell surface interactions with extracellular materials. Annu Rev Biochem. 52: 761-799.
15. Yamada KM, Akiyama SK. 1984. The interactions of cells with extracellular matrix components. In: Cell Membranes: Methods and Reviews. Vol. 2. Edited by E Elson, W Frazier, L Glaser. New York: Plenum. p. 77-147.
16. Yamada KM, Akiyama SK. 1984. Preparation of cellular fibronectin. In: Methods for Preparation of Media, Supplements, and Substrata for Serum-Free Animal Cell Culture. Edited by D Barnes, DA Sirbasku, GH Sato. New York: Alan R. Liss, Inc. p. 215-230.
17. Hirano H, Kubomura S, Obara M, Gotoh S, Higashi K, Yamada KM. 1985. Structure of

the chicken fibronectin gene. In: Basement Membranes. Edited by S Shibata. Amsterdam: Elsevier. p. 131-138.

18. Akiyama SK, Yamada KM. 1986. Fibronectin. Adv Enzymol. 57: 1-57.
19. Humphries MJ, Yamada KM. 1986. Non-collagenous glycoproteins. In: Rheumatology, An Annual Review: Connective Tissue in Normal and Pathological States. Edited by K Kuhn, T Krieg. Basel: Karger. p. 104-142.
20. Humphries MJ, Obara M, Olden K, Yamada KM. 1989. Role of fibronectin in adhesion, migration, and metastasis. Cancer Invest. 7(4): 373-393.
21. Humphries MJ, Mould AP, Yamada KM. 1991. Matrix receptors in cell migration. In: Receptors for Extracellular Matrix Protein. Edited by RP Mecham, JA McDonald. New York: Academic Press. p. 195-253.
22. Yamada KM. 1991. Adhesive recognition sequences. J Biol Chem. 266(20): 12809-12812.
23. Gumbiner BM, Yamada KM. 1992. Cell-cell contact and extracellular matrix: Editorial overview. Curr Opin Cell Biol. 4: 757-759.
24. Yamada KM. 1992. Functions of integrins in cell adhesion and migration. AIDS Res Hum Retroviruses. 8(5): 786-793.
25. Akiyama SK, Yamada KM. 1993. Introduction: Adhesion molecules in cancer. Part 1 [comment]. Semin Cancer Biol. 4(4): 215-218.
26. Akiyama SK, Yamada KM. 1993. Introduction: Adhesion molecules in cancer. Part 2 [comment]. Semin Cancer Biol. 4(4): 267-324.28.
27. Gumbiner BM, Yamada KM. 1993. Cell-cell contact and extracellular matrix: Editorial overview. Curr Opin Cell Biol. 5: 769-771.29.
28. Akiyama SK, Olden K, Yamada KM. 1995. Fibronectin and integrins in invasion and metastasis. Cancer Metastasis Rev. 14(3): 173-189.
29. Aota S, Yamada KM. 1995. Fibronectin and cell adhesion: Specificity of integrin-ligand interaction. Adv Enzymol Relat Areas Mol Biol. 70: 1-21.
30. Brown KE, Yamada KM. 1995. The role of integrins during vertebrate development. Seminars Devel Biol. 6: 69-77.
31. Gumbiner BM, Yamada KM. 1995. Cell-to-cell contact and extracellular matrix [editorial]. Curr Opin Cell Biol. 7(5): 615-618.
32. Yamada KM. 1995. Book review: Studying cell adhesion. Edited by P Bongrand. Mol Membrane Biol. 12: 355.
33. Yamada KM, Miyamoto S. 1995. Integrin transmembrane signaling and cytoskeletal control. Curr Opin Cell Biol. 7(5): 681-689.
34. Lafrenie RM, Yamada KM. 1996. Integrin-dependent signal transduction. J Cell Biochem. 61(4): 543-553.
35. Miyamoto S, Yamada KM. 1996. Molecular hierarchies of cytoskeletal molecules and signaling molecules involved in integrin-dependent signal transduction. [In Japanese] Exp Med. 14: 94-99.

36. Aota S, Yamada KM. 1997. Integrin functions and signal transduction. Adv Exp Med Biol. 400B: 669-682.

37. Katz B-Z, Yamada KM. 1997. Integrins in morphogenesis and signaling. Biochimie. 79(8): 467-476.

38. Kim LT, Yamada KM. 1997. The regulation of expression of integrin receptors. Proc Soc Exp Biol Med. 214(2): 123-131.

39. Yamada KM. 1997. Integrin signaling. Matrix Biol. 16(4): 137-141.

40. Yamada KM, Geiger B. 1997. Molecular interactions in cell adhesion complexes. Curr Opin Cell Biol. 9(1): 76-85.

41. Danen EHJ, Lafrenie RM, Miyamoto S, Yamada KM. 1998. Integrin signaling: Cytoskeletal complexes, MAP kinase activation, and regulation of gene expression. Cell Adhes Commun. 6(2-3): 217-224.

42. Lafrenie RM, Yamada KM. 1998. Integrins and matrix molecules in salivary gland cell adhesion, signaling, and gene expression. Ann N Y Acad Sci. 842: 42-48.

43. Tamura M, Yamada KM. 1998. Tumor suppressor PTEN: A negative regulator of cell adhesions via integrins. Exp Med. 16: 2211-2213.

44. Yamada KM. 1998. Book review: Cytoskeletal-Membrane Interactions and Signal Transduction. Edited by P Cowin, MW Klymkowsky. Mol Membrane Biol. 15: 243-244.

45. Zamir E, Katz B-Z, Aota S, Yamada KM, Geiger B, Kam Z. 1999. Molecular diversity of cell-matrix adhesions. J Cell Sci. 112(Pt 11): 1655-1669.

46. Yamada KM. 2000. Fibronectin peptides in cell migration and wound repair [comment]. J Clin Invest. 105(11): 1507-1509.

47. Danen EH, Yamada KM. 2001. Fibronectin, integrins, and growth control. J Cell Physiol. 189(1): 1-13.

48. Katz B-Z, Krylov D, Vinson C, Yamada KM. 2001. Novel application for producing site-specific modifications of subcellular structures: Enzymatic modulation of focal contacts by leucine zipper-mediated targeting (update to: "Green fluorescent protein labeling of cytoskeletal structures—Novel targeting approach based on leucine zippers"). In: Cloning and Expression Vectors for Gene Function Analysis. Edited by Q Lu, MP Weiner. Westborough, MA: BioTechniques Press, Eaton Publishing. p. 191-194.

49. Cukierman E, Pankov R, Yamada K. 2002. Cell interactions with three-dimensional matrices. Curr Opin Cell Biol. 14(5): 633-639.

50. Pankov R, Yamada KM. 2002. Fibronectin at a glance. J Cell Sci. 115(Pt 20): 3861-3863.

51. Sakai T, Larsen M, Yamada KM. 2002. Microanalysis of gene expression in tissues using T7-SAGE: Serial analysis of gene expression after high-fidelity T7-based RNA amplification. In: Current Protocols in Cell Biology. Edited by JS Bonifacino, M Dasso, JB Harford, J Lippincott-Schwartz, KM Yamada. New York, NY: John Wiley & Sons, Inc. p. 19.3.1-19.3.30.

52. Yamada KM, Clark K. 2002. Cell biology: Survival in three dimensions. Nature. 419(6909): 790-791.

53. Yamada KM, Even-Ram S. 2002. Integrin regulation of growth factor receptors. Nat Cell Biol. 4(4): E75-76.
54. Yamada KM, Kemler R. 2002. Cell-to-cell contact and extracellular matrix—Editorial overview. Curr Opin Cell Biol. 14: 527-530.
55. Geiger B, Zamir E, Kafri Y, Yamada KM. 2003. The focal adhesion: A network of molecular interactions. In: Handbook of Cellular Signaling. Edited by R Bradshaw, E Dennis. New York: Academic Press. p. 317-321.
56. Yamada KM. 2003. Cell biology: Tumour jailbreak. Nature. 424(6951): 889-890.
57. Pankov R, Yamada KM. 2004. Non-radioactive quantification of fibronectin matrix assembly. Curr Protocols Cell Biol. 10.13.1-10.13.9.
58. Rossner M, Yamada KM. 2004. What's in a picture? The temptation of image manipulation. J Cell Biol. 166(1): 11-15.
59. Sakai T, Kogo M, Larsen M, Yamada KM. 2004. Molecular analysis of salivary gland branching morphogenesis. Oral Sci Internat. 1: 16-21.
60. Even-Ram S, Yamada KM. 2005. Cell migration in 3D matrix. Curr Opin Cell Biol. 17(5): 524-532.
61. Sakai T, Larsen M, Yamada KM. 2005. Morphogenesis and branching of salivary glands: Characterization of new matrix and signaling regulators. Oral Biosci Med. 213: 105-113.
62. Endo Y, Even-Ram S, Pankov R, Matsumoto K, Yamada KM. 2006. Inhibition of rho GTPases by RNA interference. Methods Enzymol. 406: 345-361.
63. Even-Ram S, Artym V, Yamada KM. 2006. Matrix control of stem cell fate. Cell. 126(4): 645-647.
64. Larsen M, Artym VV, Green JA, Yamada KM. 2006. The matrix reorganized: extracellular matrix remodeling and integrin signaling. Curr Opin Cell Biol. 18(5): 463-471.
65. Berrier AL, Yamada KM. 2007. Cell-matrix adhesion. J Cell Physiol. 213(3): 565-573.
66. Even-Ram S, Yamada KM. 2007. Of Mice and Men -- Relevance of cellular and molecular characterizations of myosin IIA. Cell Adhes Migration 1(3): 152-155.
67. Green JA, Yamada KM. 2007. Three-dimensional microenvironments modulate fibroblast signaling responses. Adv Drug Deliv Rev. 59(13): 1293-1298.
68. Artym VV, Yamada KM, Meuller SC. 2009. ECM degradation assays for analyzing local cell invasion. Methods Mol Biol. 522: 211-219.
69. Doyle AD, Yamada KM. 2010. Cell biology: Sensing tension. Nature 466: 192-193.

Chapters and Proceedings

1. Yamada KM. 1971. Microfilaments and microtubules: Roles in axon elongation and cell movement [PhD Dissertation]. Stanford, CA: Stanford University.
2. Pastan I, Willingham M, Yamada KM, Pouyssegur J, Davies P. 1977. Biochemical basis

of the morphologic phenotype of transformed cells. In: International Cell Biology (1976-1977). Edited by BR Brinkley, KR Porter. New York: Rockefeller University Press. p. 161-167.

3. Yamada KM. 1977. Cell morphogenetic movements. In: Handbook of Teratology. Vol. 2. Edited by JG Wilson, FC Fraser. New York: Plenum. p. 199-230.
4. Hassell JR, Pennypacker JP, Yamada KM, Pratt RM. 1978. Changes in cell surface proteins during normal and vitamin A-inhibited chondrogenesis in vitro. Ann N Y Acad Sci. 312: 406-409.
5. Pastan I, Sobel M, Adams S, Yamada KM, Howard B, Willingham M, deCrombrugghe B. 1978. The use of transformed fibroblast cells as a model for differentiation. In: Differentiation and Development. Edited by F Ahamd, J Schultz, RR Russel, R Werner. New York: Academic Press. (Miami Winter Symposium. Vol. 15). p. 49-54.
6. Yamada KM, Olden K, Pastan I. 1978. Transformation-sensitive cell surface protein: Isolation, characterization, and role in cellular morphology and adhesion. Ann N Y Acad Sci. 312: 256-277.
7. Olden K, Hahn L-HE, Yamada KM. 1979. Cell adhesion and motility. In: Fibronectin: Properties and Role in Cellular Morphology and Adhesion. Edited by JD Pitts, ASG Curtis. Cambridge: Cambridge University Press. p. 357-387.
8. Yamada KM. 1980. Structure and function of fibronectin in cellular and developmental events. In: Current Trends in Prenatal Craniofacial Development. Edited by RM Pratt, R Christiansen. New York: Elsevier. p. 297-313.
9. Yamada KM, Hahn L-HE, Olden K. 1980. Structure and function of the fibronectins. Prog Clin Biol Res. 41: 797-819.
10. Yamada KM, Olden K, Hahn L-HE. 1980. Cell surface protein and cell interactions. In: The Cell Surface: Mediator of Developmental Processes. Edited by S Subtelny, NK Wessells. New York: Academic Press. p. 43-77.
11. Akiyama SK, Yamada KM, Hayashi M. 1981. The structure of fibronectin and its role in cellular adhesion. J Supramol Struct Cell Biochem. 16(4): 345-348.
12. Yamada KM. 1981. Fibronectin and other structural proteins. In: Cell Biology of Extracellular Matrix. Edited by ED Hay. New York: Plenum. p. 95-114.
13. Yamada KM, Akiyama SK, Hayashi M. 1981. Fibronectin structure and function, and its interactions with glycosaminoglycans. Biochem Soc Trans. 9(6): 506-508.
14. Bernard BA, Olden K, Yamada KM. 1982. Carbohydrates protect the collagen binding domain of fibronectin against proteolytic degradation. In: The Extracellular Matrix. Edited by S Hawkes, JL Wang. New York: Academic Press. p. 225-229.
15. Yamada KM. 1982. Biochemistry of fibronectin. In: The Glycoconjugates. Vol. 3. Edited by MI Horowitz, WW Pigman. New York, NY: Academic Press. p. 331-362.
16. Yamada KM, Hayashi M, Akiyama SK. 1982. Structure and function of fibronectin. In: The Extracellular Matrix. Edited by S Hawkes, JL Wang. New York: Academic Press. p. 25-34.

17. Yamada KM, Kennedy DW, Hayashi M. 1982. Fibronectin in cell adhesion, differentiation, and growth. In: Growth of Cells in Hormonally Defined Media. Cold Spring Harbor Laboratory.

18. Yamada KM, Hasegawa T, Hasegawa E, Kennedy DW, Hirano H, Hayashi M, Akiyama SK, Olden K. 1984. Fibronectin and interactions at the cell surface. In: Matricies and Differentiation. Edited by JR Hinchliffe, RB Kemp. New York: Alan R. Liss, Inc. p. 1-15.

19. Yamada KM, Hayashi M, Hirano H, Akiyama SK. 1984. Fibronectin and cell surface interactions. In: The Role of Extracellular Matrix in Development. Edited by RL Trelsted. New York: Alan R. Liss, Inc. p. 89-121.

20. Boucaut JC, Darribere T, Li SD, Boulekbache H, Yamada KM, Thiery JP. 1985. Evidence for the role of fibronectin in amphibian gastrulation. J Embryol Exp Morphol. 89 Suppl: 211-227.

21. Thiery JP, Boucaut JC, Yamada KM. 1985. Cell migration in the vertebrate embryo. In: Molecular Determinants of Animal Form. Edited by G Edelman. New York, NY: Alan R. Liss, Inc. p. 167-193.

22. Yamada KM, Akiyama SK, Hasegawa T, Hasegawa E, Humphries MJ, Kennedy DW, Nagata K, Urushihara H, Olden K, Chen W-T. 1985. Recent advances in research on fibronectin and other cell attachment proteins. J Cell Biochem. 28(2): 79-97.

23. Yamada KM, Humphries MJ, Hasegawa T, Hasegawa E, Olden K, Chen W-T, Akiyama SK. 1985. Fibronectin: Molecular approaches to analyzing cell interactions with the extracellular matrix. In: The Cell in Contact: Adhesions and Junctions as Morphogenetic Determinants. Edited by JP Thiery, G Edelman, E Gall. New York: John Wiley & Sons, Inc. p. 303-332.

24. Duband J-L, Rocher S, Yamada KM, Thiery JP. 1986. Interactions of migrating neural crest cells with fibronectin. In: Cellular Endocrinology: Hormonal Control of Embryonic and Cellular Differentiation. Edited by G Serrero, J Hayashi. New York: Alan R. Liss, Inc. p. 127-139.

25. Lash JW, Yamada KM. 1986. The adhesion recognition signal of fibronectin: A possible trigger mechanism for compaction during somitogenesis. In: Somites in Developing Embryos. Edited by R Bellairs, DA Ede, JW Lash. New York: Plenum. p. 201-208.

26. Thiery JP, Duband J-L, Rocher S, Yamada KM. 1986. Adhesion and migration of avian neural crest cells: An evaluation of the role of several extracellular matrix components. In: New Discoveries and Technologies in Developmental Biology. Edited by H Slavkin. (Prog Clin Biol Res. Vol. 217B). p. 155-168.

27. Yamada KM, Akiyama SK, Humphries MJ, Yamada SS, Santoro SA. 1986. Platelet and fibroblast interactions with fibronectin and other adhesive proteins. In: Biology and Pathology of Platelet Vessel Wall Interactions. Edited by G Jolles, Y Legrand, AT Nurden. New York: Academic Press. p. 53-74.

28. Humphries MJ, Yasuda Y, Olden K, Yamada KM. 1988. The cell interaction sites of fibronectin in tumour metastasis. Ciba Found Symp. 141: 75-93.

29. Yamada KM. 1988. Fibronectin domains and receptors. In: Fibronectin. Edited by DF

Mosher. New York: Academic Press. p. 47-121.

30. Humphries MJ, Olden K, Yamada KM. 1989. Fibronectin and cancer: Implications of cell adhesion to fibronectin for tumor metastasis. In: Fibronectin in Health and Disease. Edited by SE Carsons. Boca Raton, FL: CRC Press. p. 161-199.

31. Nagata K, Hirayoshi K, Nakai A, Saga S, Obara M, Yamada KM. 1989. A novel transformation sensitive heat shock protein (hsp47). In: Hyperthermic Oncology. Edited by T Sugahara, M Saito. New York: Taylor & Francis. p. 252-255.

32. Humphries MJ, Yamada KM. 1990. Cell interaction sites of fibronectin in adhesion and metastasis. In: Morphoregulatory Molecules. Edited by GM Edelman, BA Cunningham, JP Thiery. New York: John Wiley & Sons, Inc. p. 137-172.

33. Yamada KM, Yamada SS. 1990. Isolation of fibronectin receptors. In: Receptor Purification. Edited by G Litwack. Clifton, NJ: Humana Press. p. 435-449.

34. Aota S, Nagai T, Olden K, Akiyama SK, Yamada KM. 1991. Fibronectin and integrins in cell adhesion and migration. Biochem Soc Trans. 19(4): 830-835.

35. Mould AP, Askari JA, Akiyama SK, Yamada KM, Humphries MJ. 1991. An assessment of the efficacy of anti-integrin alpha subunit monoclonal antibody production using affinity purified beta-1 integrin dimers as immunogen. Biochem Soc Trans. 19(4): 361S. Yamada KM. 1991. Fibronectin and other cell interactive glycoproteins. In: Cell Biology of Extracellular Matrix. Edited by ED Hay. New York: Plenum. p. 111-146.

36. Yamada KM. 1991. Extracellular matrix. In: Encyclopedia of Human Biology. Edited by R Dulbecco. New York: Academic Press. p. 523-531.

37. Yamada KM. 1992. Expression and tissue-specific consequences of gene mutations of extracellular matrix genes. In: Chemistry and Biology of Mineralized Tissue. Edited by H Slavkin, P Price. New York: Elsevier. p. 387-388.

38. Yamada KM, Aota S, Akiyama SK, LaFlamme SE. 1992. Mechanisms of fibronectin and integrin function during cell adhesion and migration. Cold Spring Harb Symp Quant Biol. 57: 203-212.

39. Yamada KM, Aota S, LaFlamme SE. 1992. Mutational analysis of fibronectin and its receptor. In: Chemistry and Biology of Mineralized Tissue. Edited by H Slavkin, P Price. New York: Elsevier. p. 389-398.

40. Akiyama SK, Yamada KM. 1995. Fibronectin and fibronectin fragments. In: Extracellular Matrix Molecules: A Practical Approach. Edited by MA Haralson, JR Hassell. p. 175-185.

41. Aota S, Yamada KM. 1995. Extracellular matrix molecules. In: Encyclopedia of Molecular Biology. Edited by J Kendrew. Oxford: Blackwell Science. p. 365-370.

42. Yamada KM, Clark RAF. 1995. Provisional matrix. In: Molecular and Cellular Biology of Wound Repair. 2nd ed. Edited by RAF Clark. New York: Plenum. p. 51-93.

43. Yamada KM, Gailit J, Clark RAF. 1995. Integrins in wound repair. In: Molecular and Cellular Biology of Wound Repair. 2nd ed. Edited by RAF Clark. New York: Plenum. p. 311-338.

44. Yamada KM. 1996. Cell-matrix interaction during development. In: Studies in Stomatology and Craniofacial Biology on the Threshold of the 21st Century. Edited by MM Cohen Jr, BJ Baum. Burke, Virginia: IOS Press. p. 17-37.
45. Yamada KM. 1997. Extracellular matrix. In: Encyclopedia of Human Biology. 2nd ed., Vol. 3. Edited by R Dulbecco. New York: Academic Press. p. 871-881.
46. Miyamoto S, Katz B-Z, Lafrenie RM, Yamada KM. 1998. Fibronectin and integrins in cell adhesion, signaling, and morphogenesis. Ann N Y Acad Sci. 857: 119-129.
47. Bonifacino JS, Dasso M, Harford JB, Lippincott-Schwartz J, Yamada KM, Morgan KS, editors. 1998-present. Current Protocols in Cell Biology. New York: John Wiley & Sons, Inc.
48. Baum BJ, Wang S, Cukierman E, Delporte C, Kagami H, Marmary Y, Fox PC, Mooney DJ, Yamada KM. 1999. Re-engineering the functions of a terminally differentiated epithelial cell in vivo. Ann N Y Acad Sci. 875: 294-300.
49. Yamada KM. 1999. Cell Adhesion Molecules. In: Encyclopedia of Molecular Biology. Edited by TE Creighton. New York: John Wiley & Sons, Inc. p. 361-366.
50. Dhawan S, Boykins RA, Yamada KM. 2000. A novel HIV-Tat multiple-peptide conjugate system: Potential candidate for AIDS vaccine. In: Proceedings of the XIII International AIDS Conference; Bologna, Italy: Monduzzi Editore. p. 235-240.
51. Yamada KM, Danen EHJ. 2000. Integrin signaling. In: Signal Transduction, Cell Cycle, and Their Inhibitors. Edited by JS Gutkind. Totowa, New Jersey: Humana Press. p. 1-25.
52. Yamada KM. 2002. Cell adhesion molecules. In: Wiley Encyclopedia of Molecular Medicine. New York: John Wiley & Sons, Inc. p. 711-717.
53. Yamada KM, Pankov R, Cukierman E. 2003. Dimensions and dynamics in integrin function. Braz J Med Biol Res. 36(8): 959-966.
54. Sakai T, Onodera T, Yamada KM. 2009. Cleft formation and branching morphogenesis of salivary gland: Exploration of new functional genes. In: Interface Oral Health Science 2009. Edited by Sasano T, Suzuki O, Tokyo, Japan: Springer, p. 13-19.
55. Doyle AD, Yamada KM. 2010. Cellular mechanotransduction: Interactions with the extracellular matrix. In: Cellular Mechanotransduction: Diverse Perspectives from Molecules to Tissues. Edited by MRK Mofrad, RD Kamm. Cambridge, UK: Cambridge University Press, p. 120-160.
56. Geiger B, Yamada KM. 2011. Molecular architecture and function of matrix adhesions. Cold Spring Harb Perspect Biol, in press.

Other: Books

1. Yamada KM, editor. 1983. Cell Interactions and Development: Molecular Mechanisms. New York: John Wiley & Sons, Inc.
2. Bonifacino JS, Dasso M, Harford JB, Lippincott-Schwartz J, Yamada KM, editors. 2004. Short Protocols in Cell Biology. New York, NY: John Wiley & Sons, Inc.

3. Bonifacino JS, Dasso M, Harford JB, Lippincott-Schwartz J, Yamada KM, editors. 2011. Current Protocols in Cell Biology. New York, NY: John Wiley & Sons, Inc.
4. Hynes RO, Yamada KM, editors. 2011. Extracellular Matrix Biology, Woodbury, NY, Cold Spring Harbor Laboratory Press.

LIST OF INVENTION REPORTS AND PATENTS

Invention Report No. E-138-97/0, “A modular intracellular targeting system based on modified leucine zipper dimerization domains,” B.-Z. Katz, K.M. Yamada, C.Vinson, and D. Krylov, 1997

Invention Report No. E-114-00/0, “Pathogenic TAT peptides.” Dhawan, S., Boykins, R.A., and Yamada, K.M., 2000

United States Patent No. 6,743,626, “Artificial salivary gland,” Baum, B.J., Yamada, K.M., Cukierman, E., and Mooney, D., 2004

Invention report No. E-001-2008/0 and Patent application US 2009-0096133-A1, “Micropatterning of Biological Molecules using Laser Ablation,” Doyle, A.D., Yamada, K.M., and Wang, F.W., 2008-9

Invention report No. E-276-2009, "Induction of heme oxygenase-1 inhibits dengue, west nile virus, poxvirus, influenza virus, and leishmania infections," Dhawan, S., and Yamada, K.M., 2009