CURRICULUM VITAE

Woodring Erik Wright, M.D., Ph.D.

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Personal Data:
Born June 21, 1949; San Francisco, California
Married, two children

Education:

1970	B.A., Harvard University, Cambridge, Massachusetts (Summa Cum Laude)
1974	Ph.D., Department of Medical Microbiology, Stanford University School of Medicine, Stanford, California
1975	M.D., Stanford University School of Medicine, Stanford, California.

Professional Experience:

1975-1978	Postdoctoral Fellow (U.S.- France exchange of Scientists program, 1975-1976; NIH Research Service Award, 1976-1978), Institut Pasteur, Paris, France (Sponsor: Dr. François Gros)
1978-1985	Assistant Professor, Departments of Cell Biology and Internal Medicine, The University of Texas Southwestern Medical Center, Dallas, TX
1985-1992	Associate Professor, Department of Cell Biology and Neuroscience, The University of Texas Southwestern Medical Center, Dallas,
1992-	Professor, Department of Cell Biology, The University of Texas Southwestern Medical Center, Dallas, TX
2001-	Southland Financial Corporation Distinguished Chair in Geriatric Research

Honors and Awards:

1966	Valedictorian of graduating class of 480, Lawrence High School, Lawrence Kansas
1966	Summerfield Scholarship, University of Kansas (declined)
1966-1970	National Merit Scholarship
1966-1970	Harvard College National Scholarship
1967	Whittaker Prize for outstanding academic record, freshman year, Harvard University, Cambridge, Massachusetts
1968	Detur Prize for outstanding academic record, sophomore year, Harvard University, Cambridge, Massachusetts
1970	Summa Cum Laude, Phi Beta Kappa, Harvard University, Cambridge, Massachusetts
1970	Woodrow Wilson Summer Independent Study Award
1970-1971	Woodrow Wilson Fellowship
1971-1975	Fellow, Medical Scientist Training Program, Stanford University School of Medicine, Stanford, California
1975	Awarded NSF/NATO Postdoctoral Fellowship in Science (declined)

1975-1976	Fellow, U.S.- France Exchange of Scientists Program, Institut Pasteur, Paris, France
1976-1978	Fellow, National Institutes of Health Research Service Award, Institut Pasteur, Paris, France
1978	Scientific Research Board, Aging Prevention and Research Foundation Limited, Locust Valley, New York
1978	The Lyndon Baines Johnson Research Award of the American Heart Association, Texas Affiliate
1978-1983	Research Career Development Award from the National Institutes of Health
1986-1996	MERIT Award from the National Institute on Aging; Gene Expression in Aging and Development
1987-1991	Member, Molecular Cytology Study Section, National Institutes of Health
1992-1996	Scientific Research Committee, American Federation for Aging Research
1992-	Scientific Advisory Board, Geron Corporation, Menlo Park, CA
1993	Outstanding Teacher Award, UTSW Medical School Class of 1996
1993	Longevity Assurance Gene Special Study Section, National Institutes of Health
1994	Outstanding Teacher Award, UTSW Medical School Class of 1997
1995	Human Embryology and Development Study Section, National Institutes of Health
1995	AlliedSignal Award for Research on Aging (with Dr. Jerry W. Shay)
1996	Molecular Cytology Study Section, National Institutes of Health
1998	Health Care Hero Award, Dallas Business Journal
1998	Popular Science “Best of What’s New” Award for Science and Technology
1999	COADS Award, Outstanding Research, 1999 Pan Am Congress of Gerontology
1999-	Scientific Advisory Board, Buck Center for Research in Aging
1999-	Academic Senate, Gerontological Economic Research Organization, Kreuzlingen, Switzerland
1999	Outstanding Teacher Award, UTSW Medical School Class of 2002
2001	Hayflick Award, American Aging Association
2001	CDF-2 Study Section (Molecular Cytology), National Institutes of Health
2002	CDF-2 Study Section (Molecular Cytology), National Institutes of Health
2002-2006	Ellison Foundation Senior Scholar Award
2003	NHLBI Program Project Review Committee, ZRG1 ASG (Aging Systems and Geriatrics), and Biology of Development and Aging IRG, National Institutes of Health
2004	External Review Committee, Nathan Shock Center on Aging, University of Michigan
2004	Ellison Medical Foundation Aging Award Review Committee

Research Experience:

1967-1970:
Harvard University, in the laboratory of Professor George Wald, Department of Biology (undergraduate Honors thesis). The absorption spectrum of the visual pigment rhodopsin becomes aberrant when rhodopsin is placed in dry gelatin films. This aberration was found to be caused by the orientation of rhodopsin by the gelatin film. A technique was developed producing much higher degrees of orientation. This oriented rhodopsin was examined at liquid nitrogen temperatures, and it was shown that the rhodopsin chromophore did not substantially change its position during the changes that occur after rhodopsin is exposed to light.

1970-1975:
Stanford University School of Medicine, in the laboratory of Professor Leonard Hayflick, Department of Medical Microbiology (Ph.D. dissertation). Techniques were developed for producing mass populations

of anucleate cytoplasms and isolating hybrids between anucleate cytoplasms and whole cells. These techniques were used to perform what amounted to cytoplasmic transplants between old and young normal human fibroblasts. These experiments demonstrated that cytoplasmic factors do not control *in vitro* cellular senescence.

1975-1978:
Pasteur Institute, in the laboratory of Dr. François Gros, Director General of the Pasteur Institutes (Postdoctoral fellowship). A technique was developed that permitted the isolation of heterokaryons and hybrids between any types of cells without the need for genetic markers. This method was use to produce hybrids between different lines of myogenic cells in order to elucidate the control mechanisms underlying myoblast differentiation.

1978-present:
The University of Texas Southwestern Medical Center at Dallas. Chromosomes are capped by structures called telomeres. DNA polymerase is unable to replicate the ends of linear DNA molecules, and the ribonucleoprotein telomerase compensates for this by adding telomeric repeats to the ends of the chromosome. Telomerase is turned off in most somatic tissues during development, and in its absence telomeres shorten. This ultimately limits the number of times normal human cells are able to divide. Our ability to prevent telomere shortening by expressing the catalytic subunit of telomerase in normal diploid cells and the demonstration that this effectively immortalizes many different cell types profoundly effects our approaches for the treatments of genetic defects, diseases of aging and cancer. We are exploring the molecular mechanisms regulating telomere shortening and telomerase action, and pursuing a variety of approaches to exploit these insights for the treatment of cancer and age-related diseases.

Research Grants (W. E. Wright is the Principal Investigator on all grants unless otherwise noted: Direct Costs listed)

1978-1979	The University of Texas Health Science Center at Dallas, Southwestern Medical School, Institutional Grant: Differentiation of Cardiac Muscle. Total Award: $4,000
1978-1979	American Heart Association, Texas Affiliate: Differentiation of Cardiac Muscle. Total Award: $13,2000
1980-1982	American Heart Association: Differentiation of Cardiac Muscle. Total Award: $40,920
1980-1982	Muscular Dystrophy Association: Common-Partner Heterokaryon Analysis of Chicken Skeletal Myoblasts in Culture. Total Award: $72,805
1983-1985	Muscular Dystrophy Association: Differentiation in Myogenic Heterokaryons and Myoblast Senescence in Muscular Dystrophy. Total Award: $91,409
1986-1987	Muscular Dystrophy Association. Cell and Molecular Genetic Analysis of Myogenesis and Dystrophy. Total Award: $72,534
1989-1991	Muscular Dystrophy Association. Function/Regulation of the Muscle Regulatory Factor mdf1. Total Award: $135,000
1992-1995	Muscular Dystrophy Association. CASTing for the Targets of Muscle bHLH Proteins. Total Award: $126,100
1978-1983	NIH Research Career Development Award: Control of Gene Expression in Heterokaryons. Total Award: $192,358
1978-	NIH Research Grant: Gene Expression in Aging and Development.
	Total Award: $133,205 1978-1981
	$515,369 1981-1986
	$664,073 1986-1991; MERIT Award
	$1,163,120 1991-1996; MERIT Award

$1,155,794 1997-2002
$1,444,894 2003-2008

1989- NIH Research Grant: Mechanism of Cellular Immortalization (Co-PI: Jerry W. Shay).
Total Award: $770,796 1989-1994
$1,007,586 1994-1999
$1,510,883 2000-2007

1992- Sponsored Research Agreement: The Role of Telomeres in Regulating Gene expression (Co-PI: Jerry W. Shay), Geron Corporation.
Total Award: $600,000 1992-1995
$546,600 1996-1999
$725,000 2000-2005

1995-1997 Allied Signal Award: Molecular Mechanisms Regulating the Rate of Telomere Shortening (Co-PI: Jerry W. Shay) Total Award: $200,000

1996-1997 Texas Higher Education: Telomerase Activity for Cancer Diagnosis and Prognosis (Co-PI: Jerry W. Shay). Total Award: $158,004

1996 CapCure: Peptide Nucleic Acids Directed against the RNA Component of Human Telomerase in Advanced Prostate Cancer (Co-PIs: Jerry W. Shay and David R. Corey). Total Award: $100,000

1997-2000 The Welch Foundation: Structure of Telomeric Overhangs. Total Award: $111,000

2001 Ellison Medical Foundation
Woodring E. Wright and Jerry W. Shay, sponsors (Joe Baur, predoctoral fellow)
Oxidative damage and telomeres ($10,000 research award)

2002-2006 Ellison Foundation Senior Scholar Award: Functional Tests of Replicative Aging in Organotypic Skin Equivalents. Total Award $600,000

Teaching and Service at the University of Texas Health Southwestern Medical Center

Medical Student Courses:

- Biology of Cells and Tissues, 1979 to present
- Assistant Course Director, Biology of Cells and Tissues, 1993-1995
- Course Director, Biology of Cells and Tissues, 1995-2003
- Medical Biochemistry, 1994
- Genetics and Development, 1979, 1980
- Lectures to Geriatric Fellows: 2000 to present
- Geriatric Grand Rounds, 2002, 2004
- MSTP summer Core Course 2004

Graduate Student Courses:

- Readings in the Current Literature, 1981, 1982
- Advanced Topics in Cell Biology, 1982, 1984, 1986
- Readings in the Biology of Aging, 1981
- Advanced Physiology-Cellular Physiology, 1983
- Special Topics in Cell and Molecular Biology, Course director, 1986-1991
- Fundamentals in Cell Biology, 1988, 1989, 1990
- Gene Expression, 1992, 1993
- First Year Core Course, l991, 1995, 1996, 1999 to present
- Gene Therapy and Genetic Engineering, 2002
- Ellison Foundation Course on the Biology of Aging (at the Marine Biol. Labs, Woods Hole, MA), 2000-to present
- Cancer Biology, 2004-present
- Bioethics, 2005

Extension Courses

- Mini-Medical School course on Aging, May and October, 2000
- STARS Aging Symposium, April 2001

Member, Graduate Program in Cell Biology and Graduate Program in Cell and Molecular Biology (1978-1991), Genetics and Development (1991-present).

Ph.D. dissertation committees: Mike Clark, Cheryl Walker, William Mathews, Marty Buchanen, John Winston, Sandy Leachman, Kathleen Clark (Chair), Raymond Lee, John Phelan, Marlie Walton, Quan Yang Doris Brown (Chair), Elizabeth Cronin, Igor Rybkin (Chair), Christopher Antos, Abdullah Shaito, Irena Koulich, Yuri Kim and on Masters committee for Michael Kleinman, Anthony Mathews and Lou Miranda..

Genetics and Development qualifying exam committees: 1993 Andrea Sestak, David Berman;1996 Ying Liu, Jill Buettner; 1997 Brian Cooper; 1998 Christopher Amos, 1999 Ximwei Cao, 2000 Zhingao Wang, 2001 Ankur Saxena, 2002 Abdullah Shaito, 2004 Ruth Bauer

Rotation Students:

Richard Bishop, Craig Morris, Jun Tsuji, Linda Ko, Ann Fletcher, Hong Dong, Grant Risdon, Li-Hsien Wang, Elizabeth Miley, Raymond Lee, Kathleen Clark, Jun Chen, Daniel Pak, Gregory Blakey, Jason Grayson, Bill Nordstrom, Jun Chen, Ed Esplin, Paul Pompa, Dara Aisner, Wendy Milling, Carter Cliff, Joe Baur, Andrew Williams, Hirotoshi Hoshiyama, Carrie Norris, Christy Duncan, Jen-Hsuan Wei, Richard McLaughlin, Oliver Delgado, Tracy Chow, Christen Buseman, Scott Younger, Vera Paulson

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Graduate Trainees

Ruben Ramirez, 1995-2000; Pat McChesney, 1997-2001; Dara Aisner, 1997-2001 (M.D.-Ph.D.); Joe Baur, 1998-2003; Ying Zou, 2000-2005; Agnel Sfeir, 2003-2006; Nuno Gomez, 2003-present; Vikash Bagwandan, 2004-present, Christine Duncan, 2005-present; Hirotoshi Hoshiyama, 2005-present; Oliver Delgado 2005-present, Christen Buseman 2006-present, Tracy Chow 2006-present

Postdoctoral Trainees:

Victor Lin 1983-1989; Karen Farmer 1987-1995; Michael West, 1989-1992 ; Bridgitte Van Der Haegen, 1990-1992; Taichi Uetsuki 1991-1993; Mieczyslaw A. Piatyszek, 1990-1995; Isabelle Savre-Train, 1990-1993, 1995-1998; Walter Funk, 1991-1993; Michel Ouellette, 1991-1999; Asha Rathi, 1992-1994; Yury Romanchikov, 1992-1994; Dana Brasiskyte, 1992-1995; Yan Ying, 1992-1994; Lauren Gollahon, 1993-1997; Shawn Holt, 1994-1998; Cynthia Adamson, 1994-1995; Takeshi Isomura, 1995-1996; Valerie Tesmer, 1996-1999; Deborah Fredericks, 1996-1997; James Norton, 1996-1998; Charles Epstein, 1996-1997; Carmela Morales, 1996-2000; Michael Hu, 1998-2000; Kazuhiro Abeyama, 1998; Xiaoming Yi, 1998-2002; Brittney-Shea Herbert, 1998-2003; Lance Ford, 1998-2001; Susanne Steinert, 1998-2004; Melville Vaughn, 1999-2004; Laura White, 2000-2002; Meaghan Petty, 2000-2003; Ying Zou, 2000-2005; Nicholas Forsyth 2000-2004; Yu-Sheng Cong, 2001-2002; Oliver Bechter, 2001-2004; Weihang Chai 2001-2005; Masahiro Takakura 2002-2004, Virginia Pierce 2002-2005; Gunnar Dikmen 2003, Chun-Hong Zhu 2003-present; Genelle Gellert, 2003-2004; Shalmica Jackson,2004-present;Wallace Shariff, 2004-present; Zhenjun Lou, 2004-present; Shobhana Natarajan, 2004-present, Jinyong Kim, 2005-present; Calin Marian, 2005-present, Phillip Smiraldo 2006-present, Ying Zhao 2006-present

Committees:

Cell and Molecular Biology Curriculum Committee, 1985-1991
Committee on Graduate Students, 1985, 1986
Cell Biology Admissions Committee, 1986-1990 (Chair 1987-1989)
Geriatrics Chair Search Committee, 1988-1990
Graduate School Publications Committee, 1990
Developmental Biology Initiative Committee, 1989-1990
Cell Biology Works-in-Progress Committee, 1990
Genetics and Development Admissions Committee, 1991
American Cancer Society Institutional Seed Grant Committee, 1992-
McDermott Chair Search Committee, 1993
Student Promotions Committee, 1995-2003
Medical Education and Curriculum Committee, 1995-2003
Committee on Graduate Education, 1996
Ad hoc Subcommittee of Promotions and Tenure Committee, 1996
Faculty Tribunal Panel 1997-present
Table Host, President's Research Council Dinners, 1998-
Promotions and Tenure Ad Hoc Committee, 2000

Nominata Award Committee, 2001
Medical Education and Curriculum Educational Objectives Subcommittee, 2002
Promotion and Tenure Ad Hoc Committee, 2002
Judge, Cardiac Development and Regeneration Symposium Poster session, 2003
Ad Hoc subcommittee Tenure and Promotions re Dr. David Chen, 2004
Faculty Promotions and Tenure 2004-
Six year Research Planning Committee, 2005

Invited Symposium Presentations:

1974

"Contributions of Cytoplasmic Factors to in vitro Cellular Senescence." 3rd Annual Conference on the Biology of Aging and Development, Federation of American Societies for Experimental Biology, Atlantic City, New Jersey, April, 1974.

1975

"The Effect of Cytoplasmic Hybridization on in vitro Cellular Senescence." 10th International Congress of Gerontology, Jerusalem, Israel, June, 1975.

1980

"Common Partner Heterokaryon Analysis of Dystrophic Chicken Skeletal Myoblasts in Culture." 3rd Annual Carrel-Krusen Symposium, Texas Scottish Rite Hospital for Crippled Children, Dallas, Texas, November, 1980.

1981

"Common Partner Heterokaryon Analysis of Dystrophic Chicken Skeletal Myoblasts in Culture." 4th Annual Carrel-Krusen Symposium, Texas Scottish Rite Hospital for Crippled Children, Dallas, Texas, November, 1981.

1982

"Cellular Senescence and Muscular Dystrophy." 5th Annual Carrel-Krusen Symposium, Texas Scottish Rite Hospital for Crippled Children, Dallas, Texas, November, 1982.

1984

"Amplification of the Expression of Genes Regulating Terminal Myogenesis." Myogenesis: Cellular and Molecular Basis, satellite symposium of the 3rd International Congress on Cell Biology, Tokyo, Japan, September, 1984.

1985

"Somatic Cell Genetic Analysis of Myogenesis." UCLA Symposia on Molecular and Cellular Biology: Molecular Biology of Muscle Development, Park City, Utah, March, 1985.

"Cloning Regulatory Muscle Genes." First International Symposium on Cellular Endocrinology: from Embryos to Cells: Hormonal Control of Differentiation, Lake Placid, N.Y., August, 1985.

1986

"Toxin-antitoxin selection for Somatic Cell Fusion Products." National Capitol Area Branch Tissue Culture Meetings, Washington, D.C., March, 1986.

"Regulation of Gene Expression during Cell Differentiation." VI International Congress on Neuromuscular Diseases, Los Angeles, CA., July 1986.

"Cloning of Amplified Regulatory Molecules." EMBO/INSERM Conference on Gene Expression during Myogenesis, Bendor, France, September 1986.

1988

"pBU65, An early factor transiently expressed during myogenesis in culture and in fetal development.", 4th International Congress on Cell Biology, Montreal, Canada, August, 1988

1989

"Myogenin: A muscle regulatory factor involved in determination and differentiation." 11th International Congress of the International Society of Developmental Biologists, Utrecht, The Netherlands, August, l989

"Mdf1, a factor regulating muscle cell differentiation, has a domain homologous to MyoD1." EMBO Workshop on the Cellular and Molecular Biology of Muscle Development, Cambridge, England, September 1989

"Evidence for a two-stage model of cellular immortalization." Gerontological Society of America, Minneapolis, Minnesota, November, 1989

1990

"Myogenin and the HLH family of muscle regulatory genes". UCLA Symposium on Negative Controls on Cell Growth, Taos, New Mexico, March, 1990

"Myogenin and the regulation of muscle differentiation", American Society of Biochemistry and Molecular Biology, New Orleans, Louisiana, June, 1990

"Multimer structure effects on myogenin DNA binding activity", Uehara Memorial Foundation Symposium on Frontiers in Muscle Research, Tokyo, Japan, July, 1990

"Reversible Immortalization of Human Cells", Second International Conference on Longevity and Aging, New York City, New York, September, 1990

"Myogenin Multimer Structure Affects DNA Binding Activity", American Society for Cell Biology, San Diego, California, December 1990

1991

"Monomers, dimers and tetramers: Assembly patterns and their effects on myogenin functions", Keystone Symposium on Gene Expression in Neuromuscular Development, Keystone, Colorado, January 1991

"Multimeric Structures influence the binding activity of bHLH muscle regulatory factors. Society of Experimental Biology Symposium on The Molecular Biology of Muscle, Birmingham, England, September 1991

"Potential Roles of RB and p53 in the M1 and M2 mechanism of human cellular senescence", Gerontological Society of America, San Francisco, California, November, 1991

"Mechanisms of cellular immortalization" , Symposium on Human Fibroblast-like Cells as a Model System for the Study of Senescence - Current Status - 1991, The Samuel Roberts Noble Foundation, Ardmore, Oklahoma, December 1991

1992

"Muscle bHLH proteins and the control of myogenesis", Plenary Lecture, Australia New Zealand Society of Cell Biology, Perth, Western Australia, February 1992

"Myogenin and the formation of multicomponent transcriptional complexes", FASEB conference on "Transcriptional Regulation: Differentiation, Development and Disease", Copper Mountain, Colorado, June 1992

"Cooperative interactions between the myogenic bHLH proteins and other factors", EMBO Workshop of the Molecular Biology and Pathology of Skeletal and Cardiac Myogenesis, Capocaccia, Italy, September 1992

1993

"Cellular Aging: The Black Box Disappears", Cardiovascular Research Institute Lecture, U.C. California, San Francisco, February, 1993

"Tumor Suppressor Genes and the Regulation of Cellular Senescence", Keystone Symposium on the Molecular Biology of Aging, Lake Tahoe, California, March 1993

"Telomeres and the M1, M2 mechanism of Senescence", Center for Gerontological Research, Medical Colege of Pennsylvania, April, 1993

"Lineage Differences in the M1 mechanism of cellular senescence", FASEB Summer Research Conference, Saxtons River, Vermont, August 1993

"Mechanisms of Cellular Immortalization", Division of Research Grants Workshop on Cell Cycle Progression, Aging and Cell Death, Bethesda, Maryland, October 1993

1994

"Multicomponent Complexes involving Myogenin, MRF4, Myf5 and MyoD", Keystone Symposium on the Molecular Biology of Muscle Development, Snowbird, Utah, April, 1994

1995

"Cellular Senescence", Geriatric Grand Rounds, Southwestern Medical School, Dallas, TX January 1995

"Myogenin and the Regulation of Muscle Cell Differentiation", symposium on Muscular Dystrophy: Muscling in on Gene Therapy, Texas Tech Univ. School of Medicine, Lubbock, TX, April 1995

"Telomerase, p53 and pRB in Aging and Cancer", Symposium on Cell Cycle Control and Cancer, Vanderbilt University, Nashville, Tennessee, May, 1995

"CASTing for Myogenin Targets", NICHHD Symposium on Molecular Mechanisms Regulating Skeletal Muscle Plasticity, Airlie, Virginia, September, 1995

1996

"Cellular Senescence and stem cells", Cellular and Molecular Biology of Mesenchyme, Banbury Conference, Cold Spring Harbor, NY, February, 1996

"Telomeres, Aging and Cancer", Ninth Annual American Federation for Aging Research Conference, Harriman, NY, June 1996

"From heterokaryons to transcription factors: myogenin and the regulation of muscle differentiation", Biological Regulation, a meeting in honor of François Gros, Annecy, France, June 1996

"Modification of Telomere Length", Geron Telomerase and Cancer Symposium, Kamuela, Hawaii, August 1996

"The Role of p53 in Aging and Cancer", FASEB Conference on Clonal Senescence and Differentiation, Snowmass, Colorado, August 1996

"Telomeres and Telomerase in the Biology of Aging and Cancer", Dept. of Human Biological Chemistry and Genetics, UTMB Galveston, Galveston, TX, September 1996

"Telomerase, Aging and Cancer", Dept. of Microbiology, UT Southwestern Medical Center, September 1996

"Telomeres, Aging and Immortalization", Nathan Shock Center of Excellence in the Basic Biology of Aging, University of Washington, Seattle, WA, October 1996

"G-rich Overhang in Human Telomeres", Telomeres and Telomerase, Banbury Conference, Cold Spring Harbor, NY, November 1996

"Telomere Shortening and the Molecular Basis of Human Cellular Senescence", Symposium on Senescence, American Society of Cell Biology Annual Meeting, San Francisco, December, 1996

1997

"Telomeres & Telomerase in Aging & Cancer", Twentieth Annual Interdisciplinary Cancer Workshop, Tulane and LSU Cancer Center, New Orleans, Louisiana, March 1997

"Telomeres in Aging & Cancer", Federation of North Texas Universities Molecular Biology Symposium on Telomeres, Texas Woman's University, Denton, TX, April 1997

"The Telomere/Telomerase Hypothesis of Aging and Cancer", Symposium, American Society of Clinical Oncology Annual Meeting, Denver, CO, May 1997

"Telomere Shortening, Human Cellular Senescence and Cancer". Beatson International Cancer Conference, Cancer: From Pedigree to Protein, Glasgow, Scotland, July 1997

"Telomere Shortening, Human Cellular Senescence and Cancer", Symposium on the Human Genome, Annual Meeting of the Biochemical Society of Chile, Valdivia, September 1997

1998

“Telomerase Blocks Aging in Normal Human Diploid Cells”, Department of Toxicology, Texas A&M University, College Station, Texas, February, 1998

“Telomere Shortening Controls Human Cellular Senescence”. Third Annual Biology and Chemistry Graduate Student Research Symposium, Univ. Texas at Dallas, Dallas, Texas, April 1998

“Telomere Shortening Controls Human Cellular Senescence”. Cold Spring Harbor meeting Genetics of Aging, Cold Spring Harbor, April 1998

“Telomerase and the Control of Cellular Senescence”. NIH/NCRR Workshop on Embryonic Stem Cells, Madison, Wisconsin, May 1998

"Extension of Cellular Lifespan: Implications for Aging and Cancer", Ehrlich Lecture, UCLA School of Dentistry, Los Angeles, CA May 9998

“Telomere Dynamics in Human Cells”. Geron Symposium No.2: Telomerase and Telomere Dynamics in Cancer and Aging, Kapalua, Hawaii, August 1998

“Telomeres and Telomerase in the Regulation of Human Cellular Aging”. American Board of Internal Medicine Forum on the Future–New Science, New Markets, New Ethics?, Sun Valley, Idaho August 1998

“Telomere Function in Relation to Aging”. Joint meeting of the Danish Center for Molecular Gerontology and the Danish Center for Research on Aging, Middlefart, Denmark, November 1998

“Extension of Lifespan in Human Cells: Implications for Aging and Cancer”. UK Molecular Biology and Cancer Network Meeting XV: Genes and Cancer, Warwick, England, December 1998

1999

“Telomeres and the Regulation of Cellular Senescence”. Pan American Congress of Gerontology, San Antonio, Texas, February 1999

“Telomerase and Cancer”, Plenary Session, VIII Congress of the Spanish Association of Investigative Oncology, Sitges, Spain, April 1999

“Impact of Aging Research on the Future of Medicine”, Nebraska Health System Board of Directors, Omaha, Nebraska, May 1999

“Issues in Telomere Biology and Cellular Aging”, Molecular Biology of Aging course, Woods Hole, Massachusetts, August 1999

“Telomerase -Immortalized Normal Human Cells: Cancer and Aging”, McArdle Laboratories, University of Wisconsin, Madison, September 1999

“Telomeres and Replicative Aging”, New Biology of Aging Symposium, Kansas City, Missouri, September, 1999

“Telomeres and the Biology of Aging”, National Association of Biology Teachers (High School), Ft. Worth, Texas, October, 1999

2000

"Replicative Senescence versus non-telomere based induction of growth arrest in cultured cells". Beatson Millennium Workshop on Cellular Immortality, Glasgow, Scotland, May 2000

"Mechanisms of Telomere Shortening and Growth Arrest in Normal Diploid Cells", Geron Symposium Telomerase and Telomere Dynamics in Cancer and Aging, San Francisco, June 2000

"Telomere Shortening in Somatic Cells", Symposium on Genetically Engineering and Cloning Animals: Science, Society and Industry, Park City, Utah, June 2000

"Telomerase Regulation and Cell Immortalization", Gordon Conference on Mechanisms of Toxicity, Plymouth, New Hampshire, July 2000

"Issues in Telomere Biology and Cellular Aging", Molecular Biology of Aging course, Woods Hole, Massachusetts, August 2000

"Telomeres, Aging and Cancer: Intervening at the Ends", University of Louisville Graham Brown Cancer Center, Louisville, Kentucky, November 2000

"Telomeric Regulation of Replicative Aging", Milestones and Future of the Study of Replicative Senescence Symposium, Gerontological Society of America, Washington, D.C., November, 2000

2001

"Telomere Shortening, Aging and Cancer: Balancing Acts for Longer Living", Presidential Symposium The Neurobiology of Aging: The Aging Brain, Association for Research in Otolarynology, St. Petersburg, Florida, February 2001

"Cellular Senescence as a Tumor-Protection Mechanism: The Essential Role of Counting", Symposium on Cellular Senescence, American Association of Cancer Research, New Orleans, Louisiana, March 2001

"Manipulating Telomere Length in Aging and Cancer", UT San Antonio Health Science Center, San Antonio, Texas, March 2001

"Multiple Biological Pathways to Longevity", Conference on Anti-Aging Medicine, Tuscon, Arizona, May 2001

"Telomere Shortening and Replicative Aging in Different Developmental Lineages", Weinstein Cardiovascular Development Conference, UT Southwestern, Dallas, May 2001

"Telomere Biology, Cellular Immortalization and Cancer", Dept. Pathology and Human Genetics, Medical College of Virginia Commonwealth University, June, 2001

"Telomeres and Their Role in Replicative Aging and Cancer", Hayflick Award Lecture, American Aging Association, Madison, WI, June 2001

"Replicative Aging in Different Cell Lineages", FASEB Conference "Muscle Satellite and Stem Cells", Tuscon, Arizona, July 2001

"Telomere Biology in Aging and Cancer", Keynote Speaker, Department of Molecular Biosciences Graduate Student Symposium, University of Kansas, Lawrence, Kansas August 2001

"Issues in Telomere Biology and Cellular Aging", Molecular Biology of Aging course, Woods Hole, Massachusetts, August 2001

"Aging, Cancer, Cell Types and Species: When do Telomeres Matter?", Dept. of Pathology, Univ. Washington School of Medicine, Seattle, WA , September 2001

"Telomere Biology in Aging and Cancer", Warren W. Nichols Symposium on Chromosomes, Cancer and Genetic Instability, Merk & Co., West Point, PA, October 2001

"Replicative Aging and Cancer", Dept. Radiation Oncology, College of Physicians and Surgeons, Columbia University, New York City, NY, November, 2001

"Telomere Biology in Aging and Cancer", Eppley Cancer Center, University of Nebraska Medical School, Omaha, Nebraska, December 2001

"Telomere Biology in Aging and Cancer", SMU Symposium the Molecular Mechanisms of Aging, Southern Methodist University, Dallas, December 2001

2002

"Telomeres and Replicative Aging: Implications for Stem Cells", Workshop on Stem Cells and Orthopaedics, Orthopaedic Research Society Annual Meeting, Dallas, February 2002

"Telomere Biology and Telomerase Inhibition for Breast Cancer", Univ. Massachusettes Medical School, Worcester, Mass, March 2002

"Telomere Biology in Aging and Cancer", Geriatric Grand Rounds, UT Southwestern Medical School, March, 2002

"Issues in Telomere Biology and Cellular Aging", Molecular Biology of Aging course, Woods Hole, Massachusetts, August 2002

"Historical Lineages in Telomere Research", US-Japan Cooperative Cancer Research Program workshop, Telomeres and Telomerase in Cancer, Maui, Hawaii, August 2002

"Telomeres, Telomerase and Aging", George Martin Symposium Frontiers of Aging Research, University of Washington, Seattle, Washington, September 2002

"Telomere-based Replicative Aging versus Damage Responses in Human Cells", Banbury Center conference Cell Immortalization and Transformation, Cold Spring Harbor, New York, September 2002

"Telomerase and Cancer", American Soc. Clinical Oncology Molecular Therapeutics Symposium, San Diego, California, November 2002

“Non-canonical Telomeric Sequences in the Regulation of Replicative Aging”, Am. Assn of Cancer Research meeting The Role of Telomeres and Telomerase in Cancer, San Francisco, California, December 2002

2003

"Telomere Biology in Aging and Cancer", Semi-annual invited seminar, IFR Neurosciences, CHU Pitie-Salpetriere, Paris, France, March 2003

"Telomere Biology in Aging and Cancer", Kronos Longevity Research Institute, Phoenix, Arizona, April 2003

“Non-canonical Telomeric Sequences in the Regulation of Replicative Aging”, Telomeres & Telomerase Meeting, Cold Spring Harbor, New York, May 2003

"Telomere Biology in Aging and Cancer", Department of Cell Biology and Molecular Medicine, UMDNJ-New Jersy Medical School, Newark, New Jersey, May, 2003

"Telomere Biology in Aging and Cancer", Department of Biological Sciences, Vanderbilt University, Nashville, Tennessee, July, 2003

“Issues in Telomere Biology and Cellular Aging”, Molecular Biology of Aging course, Woods Hole, Massachusetts, August 2003

"Luciferase Imaging for folowing Cancer Therapy and Genetically Engineered Stem Cell Transplantation in Vivo", Department of Radiology Cellular and Molecular Imaging Program, UT Southwestern, October 2003

'Telomere Transition States and DNA Repair Complexes in the Regulation of Replicative Aging". First US-EU DNA Repair Meeting: Endogenous Stress, National Conference Center, Virginia, October 2003

"Chromosome Instability and Telomeres", workshop Telomeres and Telomerase: Therapeutical Targets for Cancer and Aging, Instituto Juan March de Estudios e Investigaciaones, Madrid, Spain, November 2003

2004

"The role of telomeres and telomerase", Conference "Creating Very Old People: Individual Blessing or Societal Disaster", UMDNJ New Jersey Medical School, April, 2004

"Telomere Biology in Aging and Cancer", 7th Annual Brown Colloquium on the Biology of Human Aging, Brown University, May, 2004

"Telomere Structures in Replicative Aging", Beatson International Conference on Cell Cycle, Senescence, Apoptosis and Cancer, Glasgow, Scotland, June, 2004

"Telomere Biology in Aging and Cancer", EMBL-Monterontondo Programme in Mouse Biology, Rome, Italy, June 2004

“Issues in Telomere Biology and Cellular Aging”, Molecular Biology of Aging course, Woods Hole, Massachusetts, August 2004

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Patents

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"Methods for isolating cell fusion products"

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"Therapy and Diagnosis of Conditions Related to Telomere Length and/or Telomerase Activity"

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