

CURRICULUM VITAE for ELIZABETH HELEN BLACKBURN, PH. D.
Last updated May 12, 2009

Title Morris Herzstein Endowed Chair in Biology and Physiology
Place of Birth Hobart, Tasmania, Australia
Marital Status Married to John W. Sedat, one child
Present Nationality Australian and naturalized American citizen (September 2003)
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Major Research Interests Telomere structure and telomere synthesis;
Chromosome structure and function; cancer; aging.

EDUCATION

Institution and location	Degree	Year Conferred	Scientific Field
University of Melbourne Melbourne, Australia	B.Sc. (Hon)	1970	Biochemistry
University of Melbourne Melbourne, Australia	M.Sc.	1972	Biochemistry
University of Cambridge England	Ph.D.	1975	Molecular Biology
Yale University New Haven, Connecticut	(postdoc)	1975–77	Molecular and Cell Biology

HONORS

Australian Society for Microbiology Prize (1967)
University of Melbourne Wyselaskie Scholar (1970)
Travelling Gowrie Research Scholar (1971–1973)
Anna Fuller Fund Fellowship (1975–1977)
Eli Lilly Research Award for Microbiology and Immunology (1988)
National Academy of Science Award in Molecular Biology (1990)
Harvey Society Lecturer, Harvey Society, New York (1990)
Elected, Fellow of American Academy of Arts and Sciences (1991)
Honorary Doctorate of Science, Yale University (1991)
Elected, Fellow of the Royal Society of London (1992)
Elected, Foreign Associate, National Academy of Sciences (1993)
Elected, Fellow of the American Academy of Microbiology (1993)
UCSF Women's Faculty Association Award (1995)
University of Chicago Cancer Research Foundation, Simon M. Shubitz Cancer Prize (1996)
Elected, President, American Society for Cell Biology (1998)
Gairdner Foundation Award (1998)
Australia Prize (1998)
le Grand Prix Charles-Leopold Mayer Award (1998)
Passano Award (1999)
Rosenstiel Award (1999)

HONORS (continued)

California Scientist of the Year Award (1999)
Harvey Prize (1999)
Association of American Medical Colleges Award for Distinguished Research in the Biomedical Sciences (1999)
Novartis-Drew Award for Biomedical Science (1999)
Keio University Medical Science Fund Prize (1999)
The Feodor Lynen Award (2000)
American Association for Cancer Research -G.H.A. Clowes Memorial Award (2000)
The Dickson Prize in Medicine (2000)
The Steven and Michele Kirsch Foundation Investigator Fellowship (2000)
American Academy of Achievement (2000)
Elected, Institute of Medicine (2000)
American Cancer Society Medal of Honor (2000)
Elected, Fellow of the American Association for the Advancement of Science (2000)
AACR-Pezcoller Foundation International Award for Cancer Research (2001)
Memorial Sloan-Kettering Cancer Center Katharine Berkan Judd Award Lectureship (2001)
General Motors Cancer Research Foundation Alfred P. Sloan Award (2001)
UCSF OB/GYN Edward Hill Endowed Lectureship (2001)
E.B. Wilson Award, American Society for Cell Biology (2001)
City of Medicine Award (2003)
26th Annual Bristol-Myers Squibb Award for Distinguished Achievement in Cancer Research (2003)
Indiana University School of Medicine Steven C. Beering Award (2003)
The Robert J. and Claire Pasarow Foundation Cancer Award (2003)
Honorary Doctoral Degree, University of Pennsylvania (2004)
Honorary Doctor of Science Degree, Bard College (2004)
Honorary Doctorate Degree, Brandeis University (2004)
Honorary Doctorate Degree, University of Chicago (2004)
Dr. A.H. Heineken Prize for Medicine (2004)
American Society for Cell Biology Public Service Award (2004)
Kirk A. Landon-American Association for Cancer Research Prize for Basic Cancer Research (2005)
Benjamin Franklin Medal in Life Science (2005)
New York Academy of Medicine Medal (2005)
Stanford University Frontiers in Human Embryonic Stem Cells, HESC Pioneer Award (2005)
American Society for Cell Biology Women in Cell Biology Senior Award (2005)
National Cancer Institute Alfred G. Knudson Award (2006)
Fifth annual Wiley Prize in Biomedical Sciences (2006)
Honorary Doctorate of Science Degree: Harvard University (2006)
Albert Lasker Award for Basic Medical Research (2006)
The Genetics Prize of the Peter Gruber Foundation (2006)
The 25th Meyenburg Prize (2006)
Basic Science Lectureship Award, American Society of Cytopathology (2006)
Elected, American Philosophical Society (2006)
Honorary Doctorate of Science Degree: Princeton University (2007)
Elected, Australian Academy of Science (2007)
Louisa Gross Horwitz Prize (2007)
TIME 100 Most Influential People in the World (2007)
L'Oreal UNESCO For Women In Science Award (2008)
Albany Medical Center Prize in Medicine and Biomedical Research (2008)
Weizmann Women & Science Award: Weizmann Institute of Science (2008)
Paul Ehrlich and Ludwig Darmstaedler Prize (2009)
Pearl Meister Greengard Prize (2009)

RESEARCH AND PROFESSIONAL EXPERIENCE

7/90–present	Professor, Departments of Biochemistry and Biophysics, and Microbiology and Immunology, University of California, San Francisco
7/93–7/99	Chair, Department of Microbiology and Immunology University of California, San Francisco
6/86–6/90	Professor, Department of Molecular Biology University of California, Berkeley
7/83–6/86	Associate Professor, Department of Molecular Biology University of California, Berkeley
7/78–6/83	Assistant Professor, Department of Molecular Biology University of California, Berkeley
1/78–6/78	Postdoctoral Fellow, University of California, San Francisco
3/75–9/77	Postdoctoral Fellow with Dr. Joseph G. Gall, Department of Biology, Yale University. Support: Anna Fuller Fund Fellowship. Area of Research: Chromosome and Telomere DNA structure in <i>Tetrahymena</i> .
10/71–9/74	Graduate Research Student, Division of Protein and Nucleic Acid Chemistry, MRC Laboratory of Molecular Biology, Cambridge, England. Advisor: Dr. Frederick Sanger. Support: Gowrie Travelling Research Scholarship. Commonwealth Scholarship Plan (United Kingdom Award). Area of research: Nucleic acid sequencing of bacteriophage ϕ x174.
2/70–9/71	Graduate research student enrolled for Master of Science Degree course, Department of Biochemistry, University of Melbourne, Australia. Advisor: Professor F.J.R. Hird. Support: Commonwealth Scientific and Industrial Research Organization Postgraduate Scholarship. Area of research: Mitochondrial metabolism.

EDITORIAL BOARDS

2003–2004	Member	Editorial Board, <i>Public Library of Science, Biology</i>
2003–2005	Member	Editorial Board, <i>Nucleic Acids Research</i>
2002–2007	Senior Editor	<i>Molecular Cancer Research</i>
2000–present	Member	BioMed Central Directorate
1992–2004	Associate Editor	<i>Molecular Biology of the Cell</i>
1994	Member	Editorial Board, <i>Genes & Development</i>
1992–1998	Member	Editorial Board, <i>Journal of Eukaryotic Microbiology</i>
1988–present	Member	Editorial Board, <i>Molecular and Cellular Biology</i>
1988–1991	Associate Editor	<i>Journal of Protozoology</i>
1985–1988	Member	Editorial Board, <i>Science</i>
1985–1988	Member	Editorial Board, <i>The Journal of Cell Biology</i>

PROFESSIONAL ACTIVITIES AND PUBLIC SERVICE

Public Service

2003–present	Member	California Legislature Senate Rules Committee Stem Cell Research Advisory Panel
2002	Panelist	Informational Hearing on Human Cloning and Stem Cell Research Assembly Select Committee on Biotechnology Sacramento, California
2002–2004	Member	President's Council on Bioethics

Institutional Advisory Boards and Review Committees

2008–present	Member	The National Academies Committee of Science, Technology, and Law
2005–present	Member	Overseer’s Committee to Visit the Harvard School of Dental Medicine, Harvard University
2003	Member	International Board of Review Alberta Heritage Foundation for Medical Research
2003–present	Member	Stanford University School of Medicine National Advisory Council
2003–present	Member	Scientific Advisory Board, Huntsman Cancer Research Institute University of Utah, Salt Lake City, Utah
2003–2006	Member	National Institutes of Health / National Institute of Aging National Advisory Council on Aging
2001–present	Non-Resident Fellow	The Salk Institute for Biological Studies
2001–present	Member	Scientific Advisory Board, The Division of Basic Science at the Fred Hutchinson Cancer Research Center
1998–present	Member	Scientific Advisory Board of The Walter and Eliza Hall Institute of Medical Research
1996–present	Member	National Institute on Aging Intramural Program Review Group
1996	Ad Hoc Reviewer	National Institutes of Health Reproductive Endocrinology Study Section
1991 (January)	Member	Howard Hughes Medical Institute Special Review Panel
1991 (May)	Ad Hoc Member	National Institutes of Health General Medicine Council
1987–1990	Member	NIH Study Section on Molecular Cytology
1982–1985	Member	Advisory Panel on Cell Biology, National Science Foundation

Fellowship and Awards Selection Committees

2006–2008	Member	American Association for the Advancement of Science Committee on Nominations
2006	Chair	AACR Charlotte Friend Award Committee
2005	Member	AACR Pezcoller Award Committee
2001–2006	Member	Awards Assembly, General Motors Cancer Research Foundation
2001	Chair	AACR-G.H.A. Clowes Memorial Award Selection Committee
2000–2007	Member	Board of Scientific Advisers, The Jane Coffin Childs Memorial Fund for Medical Research
1997	Nominator	MacArthur Foundation Fellows Program
1997	Member	National Academy of Sciences Award in Molecular Biology Selection Committee
1996–1999	Member	American Society for Microbiology Eli Lilly and Company Research Award Selection Committee

Scientific Conference Organizer

2004	Co-Organizer	American Association for Cancer Research Conference “The Role of Telomeres and Telomerase in Cancer” San Francisco, California
2002	Co-Organizer	American Association for Cancer Research Conference “The Role of Telomeres and Telomerase in Cancer” San Francisco, California
2001	Co-organizer	Cold Spring Harbor Laboratory Meeting “Telomeres and

1999	Co-Organizer	Telomerase” Cold Spring Harbor Laboratory Meeting “Telomeres and Telomerase”
1994 (Oct)	Co-Organizer	Banbury Conference on Telomeres Banbury Center, Cold Spring Harbor Laboratory
1994 (Feb)	Co-Organizer	UCLA-Keystone Symposium on The Eukaryotic Nucleus
1987	Co-Chair	Second International Ciliate Molecular Genetics Conference
1986	Chair	Gordon Conference on Nucleic Acids

Offices held in Scientific Societies

2009	President-Elect	American Association for Cancer Research
2008-present	Member	Western Council of the American Academy of Arts and Sciences
2006-present	Member	Board of Directors, American Association for Cancer Research
2006	Chair	Nominating Committee, The American Society for Cell Biology
2004–2009	Member	Women in Cell Biology Committee The American Society for Cell Biology
2000	Board Member	Genetics Society of America
1999	Executive Committee	The American Society for Cell Biology
1998	President	The American Society for Cell Biology
1987–1989	Member	Council of the American Society for Cell Biology Education Committee of the American Society for Cell Biology

Membership in Scientific Societies

2007-present	Member	Australian Academy of Sciences
2001-present	Member	Institute of Medicine
2000-present	Member	American Association for Cancer Research
2000-present	Member	Genetics Society of America
1977-present	Member	American Society for Cell Biology
1992-present	Member	Royal Society of London

RECENT UNIVERSITY ACTIVITIES – Selected University committees and other service

2008	Member, Ad-hoc Review Committee
2005-present	Co-chair, UCSF Strategic Planning Board
2005-present	Committee member, Human Gamete, Embryo, and Stem Cell Research Committee
2004	Invited Speaker, UCSF Pulmonary Research Retreat
2003	Panel leader, UCSF Foundation Wellness Lecture <i>Women in Science: From Discoveries to Cures</i>
2002–2006	Member, UCSF Cancer Research Institute Advancement, Promotions and Merit Committee
2001–2002	Co-Chair, Department of Biochemistry and Biophysics Search Committee
2001–	UCSF Comprehensive Cancer Center Executive Committee
2001	Speaker, UC Berkeley Diversity Outreach Program
2000	Poster Session Faculty Reviewer, Graduate Students Association Career/Research Day

1999	Speaker, Mission Bay Groundbreaking-UCSF Foundation Wellness Lecture
1999	UCSF Graduate Division Commencement Speaker
1999	Gladstone Institute of Virology and Immunology Scientific Advisory Board San Francisco General Hospital
1999–present	Steering Committee, Cell Cycle Disregulation Program UCSF Comprehensive Cancer Center
1993–1999	Chair, Department of Microbiology and Immunology
1999–present	Member, Genitourinary Oncology Program UCSF Comprehensive Cancer Center
1996–present	Member, Breast Oncology Program. UCSF Comprehensive Cancer Center
1998–1999	Member, Pathology Chair Search Committee
1998	Panel member, Women Faculty Leadership Seminar Series
1997–present	Member, Qualifying Exam Committee, Department of Biochemistry and Biophysics: Oren Beske, Michael Cronin, Seiko Ishida, Steve Landt, Marion Shonn, Stephanie Wang, Jessica Blumstein, Emmit Jolly, Alan Cheng, Carolyn Ott, Tania Gonzalez, Tracy Boswell Fulton, Tamara Brenner
1997–present	Member Executive Committee, Science & Health Education Partnership Program
1997–present	Member, Biomedical Sciences Program (BMS) faculty
1997–present	Member, UCSF AIDS Research Institute Steering Committee
1996–1998	Chair, "Take our Daughters to Work Day"
1996–present	Member, School of Medicine Fundraising Advisory Council
1996–1998	Member, Parent Search Committee, UCSF Cancer Center
1996–1997	Member, UCSF Strategic Planning Board
1996	Ad Hoc Member, Resource Generation and Allocation Working Group of the Strategic Planning Board
1996	AIDS Programs Planning Task Force
1996	Member, Ad Hoc Committee, Advise Dean regarding selection of new Chair of the Department of Anatomy
1996	Member, Rheumatology Division Search Committee, SFGH
1996	Member, Qualifying Exam Committee, Department of Biochemistry and Biophysics: Jennifer Frazier, David Tobin, Meghan Sharp, Tracy Cao, Maki Inada, Javier Apfeld, Kent Duncan, Julia Owens, Oren Beske
1996	Member, Selection Committee, Herbert Boyer Distinguished Professor of Biochemistry
1996	Member, Planning Committee, Future of the "Second Campus" of UCSF
1996	Cancer Research Institute, Chair of Search Committee for Director
1996	UCSF Cancer Center, Search Committee for Cancer Cell Biology
1994–present	Graduate Admissions Committee, Biochemistry/Biophysics and PIBS
1994–1996	Dean's Executive Committee
1994–1995	Department of Biochemistry Committee for Selection of Training Grant Postdoctoral

	Fellows
1994–1995	Department of Biochemistry Committee on Postdoctoral Affairs
1994	Search Committee for Dean of School of Dentistry
1994	Planning Committee for School of Medicine 1995 Leadership Retreat
1993–present	Chair, Committee for Development of Educational Materials based on "Winding your Way Through DNA" Symposium
1992–1993	Vice-Chair, Department of Microbiology and Immunology
1992	Department of Biochemistry Committee to Select Training Grant Postdoctoral Fellows
1991–1992	Department of Biochemistry Committee on Postdoctoral Affairs
1990–1991	Human Genetics Planning Task Force

INVITED TALKS AT SCIENTIFIC MEETINGS (1982–present)

October 2008	Invited Speaker Institute of Medicine Annual Meeting, “Is Biology Destiny?” Washington, DC
September 2008	Invited Speaker Cold Springs Harbor Laboratory meeting on Molecular Genetics of Aging Cold Springs Harbor, NY
September 2008	Keynote Speaker HMRI Conference on Translational Cancer Research Newcastle, NSW, Australia
July 2008	Plenary Speaker American Association for Clinical Chemistry Annual Meeting Washington, DC
July 2008	Invited Speaker Ninth International Symposium on Neurobiology and Neuroendocrinology of Aging Bregenz, Austria
July 2008	Plenary Speaker XX International Conference on Genetics Berlin, Germany
June 2008	Keynote Speaker Gordon Research Conference on Nucleic Acids Newport, RI
December 2007	Invited Speaker AACR Conference, “The Role of Telomeres and Telomerase in Cancer Research” San Francisco, CA
Sept 2007	Invited Speaker Symposium on Telomeres, Telomerase and Genome Stability Lund, Sweden

May 2007	Keynote Speaker Paul F. Glenn Laboratories 2007 Symposium on Aging Boston, MA
May 2007	Invited Speaker Cold Springs Harbor Laboratory meeting on Telomeres & Telomerase Cold Springs Harbor, NY
May 2007	Invited Speaker ASBMB 2007 Symposia on The Signaling Pathways Controlling Cell Structure and Fate Washington, DC
April 2007	Keynote Speaker Eleventh Annual International Conference on Research in Computational Molecular Biology, RECOMB 2007 Oakland, CA
March 2007	Invited Speaker Retrotransposition, diversity and the brain, IPSEN Paris
March 2007	Plenary Speaker Scientific meeting of the Society for Gynecological Investigation Reno, Nevada
February 2007	Invited Speaker AACR Translational Research Conference San Diego, CA
January 2007	Keynote Speaker Stem Cells and Regenerative Medicine 2007 San Francisco Meeting San Francisco, CA
January 2007	Keynote Speaker Pacific Symposium on Biocomputing Maui, Hawaii
November 2006	Invited Speaker and Session Chair Josef Steiner-CNIO Cancer Conference: "Telomeres and Telomerase" Madrid, Spain
November 2006	Invited Speaker American Philosophical Society Autumn General Meeting San Francisco, California
November 2006	Basic Science Lecture American Society of Cytopathology 54 th Annual Scientific Meeting

Toronto, Canada

- November 2006 Invited Speaker
2006 Vienna Biocenter Student Symposium “Timing Age”
Research Institute of Molecular Pathology, Vienna, Austria
- September 2006 Invited Speaker
Longevity and Optimal Health: Integrating Eastern and Western Perspectives
Columbia Integrative Medicine Program, Phoenicia, New York
- September 2006 Plenary Lecturer
Applied Biosciences Asilomar Conference
Pacific Grove, California
- August 2006 Plenary Speaker
11th International Congress of Human Genetics
Brisbane, Australia
- May 2006 Reginald Harris Lecture
Cold Spring Harbor Lab 71st Symposium on Quantitative Biology: Regulatory RNAs
Cold Spring Harbor, New York
- April 2006 Invited Speaker
Beyond the Human Genome: Deciphering Biology and Disease
The Royal Society of Edinburgh/Caledonian Research Foundation, Scotland
- April 2006 Plenary Speaker
Telomeres and Senescence Symposium, Experimental Biology 2006
ASBMB Annual Meeting, San Francisco, California
- April 2006 Invited Speaker
Scientific Integrity Symposium, Experimental Biology 2006
ASBMB Annual Meeting, San Francisco, California
- March 2006 Invited Speaker
An Unexpected Life in Science: A Symposium in Honor of J. Michael Bishop
San Francisco, California
- March 2006 Invited Speaker
HealthCare Ventures 8th Annual Scientific Advisory Board Retreat
Miami, Florida
- February 2006 Leach Lecture
31st Annual Lorne Conference on Protein Structure and Function
Lorne, Australia
- February 2006 Plenary Lecture
18th Annual Lorne Cancer Conference

Lorne, Australia

- October 2005 Invited Speaker and Workshop Chair
Keystone Meeting: Stem Cells, Senescence and Cancer
Singapore
- October 2005 Invited Speaker
2005 Buck Institute Symposia on Aging: Pharmacology of Lifespan Extension
Novato, California
- September 2005 Invited Speaker
First World Conference on the Future of Science
Venezia, Italy
- September 2005 Keynote Speaker
19th International Pigment Cell Conference
Reston, Virginia
- July 2005 Invited Speaker
American Association for Cancer Research Foundation
Los Angeles, California
- May 2005 Invited Speaker and Session Co-Chair
Cold Spring Harbor Meeting on Telomeres and Telomerase
Cold Spring Harbor Laboratories, Cold Spring Harbor, New York
- May 2005 Invited speaker
22nd International Human Papillomavirus Conference
Vancouver, British Columbia
- April 2005 Keynote Speaker
Blackburn Symposium on Chromosome Stability
Drexel University College of Medicine and the Franklin Institute, Philadelphia, PA
- February 2005 Invited Speaker
Longevity Consortium Symposium
San Francisco, California
- February 2005 Invited Speaker and Session Chair
Keystone Symposium: Cancer and Development
Banff, Alberta, Canada
- January 2005 Invited Speaker and Session Chair
Gordon Research Conference on Mammalian DNA Repair
Ventura, California
- December 2004 Plenary Lecturer
27th Annual San Antonio Breast Cancer Symposium

San Antonio, Texas

- November 2004 Invited Speaker
41st Nobel Conference: Oxygen Biology
Stockholm, Sweden
- November 2004 Keynote Speaker
American Association for Cancer Research Special Conference:
The Roles of Telomeres and Telomerase in Cancer, San Francisco, California
- October 2004 Invited Speaker
Institute of Medicine Annual Meeting: Longevity and Health
Washington, D.C.
- October 2004 Invited Speaker
Nobel Symposium 130: Molecular Mechanisms of Biological Processes
Tällberg, Sweden
- October 2004 Keynote Speaker
Environmental Mutagen Society Annual Meeting
Pittsburgh, Pennsylvania
- September 2004 Invited Speaker
Telomerase and Aging Session, International Society of Differentiation Meeting
Honolulu, Hawaii
- June 2004 Session Moderator
General Motors Cancer Research Foundation Annual Scientific Conference
National Institutes of Health, Bethesda, Maryland
- May 2004 Morton I. Grossman Distinguished Lectureship
American Gastroenterological Association's Digestive Disease Week
New Orleans, Louisiana
- March 2004 Opening Plenary Session Speaker
American Association for Cancer Research 95th Annual Meeting
Orlando, Florida
- October 2003 Invited Speaker
Symposium on RNA Biology V: RNA Tools and Targets
North Carolina Biotechnology Center, Research Triangle, North Carolina
- October 2003 Invited Speaker
Oncology Drug Discovery Cancer Colloquium
Bristol-Myers Squibb, Princeton Facility, Princeton, New Jersey
- September 2003 Plenary Lecturer and Invited Symposium Speaker
ComBio 2003, Symposium on Cell Division and Dynamics of the Nucleus,

Melbourne, Australia

- July 2003 Invited Speaker
XIX International Congress of Genetics, Telomeres Session
Melbourne, Australia
- June 2003 Invited Speaker
Student Achievement's "Adventures of the Mind" Conference
Seattle, Washington
- June 2003 Invited Speaker
LVMH Symposium on Aging and Macromolecules: Influence of Oxidative Stress
Paris, France
- May 2003 Invited Participant
Lasker Foundation Millennial Forum of Ethical Challenges in
Biomedical Research and Practice, Washington, D.C.
- April 2003 Session Co-Chair
Cold Spring Harbor Meeting on Telomeres and Telomerase
Cold Spring Harbor Laboratories, Cold Spring Harbor, New York
- April 2003 Invited Speaker
DNA: 50 Years of the Double Helix
Medical Research Council Laboratory of Molecular Biology Symposium
Cambridge, England
- April 2003 Invited Speaker
Royal Society Discussion Meeting on
Replicating and reshaping DNA: a celebration of the jubilee of the double helix
London, England
- April 2003 Invited Speaker
American Association for Cancer Research 94th Annual Meeting
Telomeres and Telomerase in Tumor Initiation and Growth Symposium
Toronto, Canada
- December 2002 Meeting co-organizer and Invited Speaker
American Association for Cancer Research Special Meeting on
"The Role of Telomeres and Telomerase in Cancer"
San Francisco, California
- October 2002 Invited Speaker
Jane Coffin Childs Fund Symposium "Challenges in Biomedical Sciences"
Lakeville, Connecticut
- October 2002 Keynote Speaker
Van Andel Research Institute Symposium: Cancer Intervention 2002

Grand Rapids, Michigan

- July 2002 Invited Speaker
Longevity Consortium Symposium
Annapolis, Maryland
- June 2002 Invited Speaker
NIH/NIGMS Workshop on the Basic Biology of Mammalian Stem Cells
Bethesda, Maryland
- June 2002 Invited Speaker
Nucleic Acids Gordon Conference
Bristol, Rhode Island
- May 2002 Invited Speaker
American Society for Clinical Oncology Presidential Symposium, Biology of Cancer
Orlando, Florida
- February 2002 Invited Speaker
Longevity Consortium Symposium
Napa Valley, California
- January 2002 Invited Speaker
Keystone Symposium, Genomics and Genetics of Senescence and Cancer
Keystone, Colorado
- December 2001 The E.B. Wilson Award Lecture
American Society for Cell Biology 41st Annual Meeting
Washington D.C.
- June 2001 Invited Speaker
International Conference on Heterochromatin
Cortona, Italy
- March 2001 Invited Speaker
Second International Conference on Proteins that Bind RNA
Austin/Lake Travis, Texas
- January 2001 Plenary Lecturer
National Cancer Institute Combined Intramural Principal Investigators Retreat
Chantilly, Virginia
- December 2000 Invited Speaker
College Program, American Society for Cell Biology 40th Annual Meeting
San Francisco, California
- November 2000 Keynote Speaker
Eli Lilly/Indiana University Symposium

Indianapolis, Indiana

- October 2000 Keynote Speaker
XVIII Whitehead Symposium: Molecular Machines
Whitehead Institute, Cambridge, Massachusetts
- September 2000 Invited Speaker
Van Andel Research Institute Symposium: Cancer and Molecular Genetics in the
Twenty-first Century", Grand Rapids, Michigan
- July 2000 Invited Speaker
2nd Annual Conference of SAPA West "Biopharma: March into the New
Millennium"
South San Francisco, California
- June 2000 Invited Speaker
Geron Symposium No. 3: Telomerase and Telomere Dynamics in Cancer and Aging
San Francisco, California
- June 2000 Plenary Lecturer
American Society for Biochemistry and Molecular Biology Annual Meeting
"Cell Growth, Metabolism, and Disease"
Boston, Massachusetts
- June 2000 Invited Speaker
Cold Spring Harbor Symposium on Quantitative Biology
65th Symposium "Biological Responses to DNA Damage"
Cold Spring Harbor, New York
- April 2000 Invited Speaker
American Association for Cancer Research
AACR-G.H.A. Clowes Memorial Award Lecture
San Francisco, California
- April 2000 Invited Speaker
Keystone Symposium "The Keystone Millennium"
"Evolution of Bioinformation" and "The Cell"
Keystone, Colorado
- February 2000 Invited Speaker
Wonderfest 2000
San Francisco, California
- February 2000 Invited Speaker
Miami Nature Biotechnology Winter Symposium "DNA, RNA, and Cancer"
The Feodor Lynen Award Lecture, Miami Beach, Florida
- November 1999 Invited Speaker

Symposium “RNA-containing Molecular Machinery: Spliceosomes, Telomerase, and Ribonucleases.” Novartis Institute for Biomedical Research and Drew University, New Jersey

- October 1999 Invited Speaker
“Minds that Matter: Cancer in the Next Decade”
The 40th Anniversary of the Gairdner Foundation International Awards
Toronto, Canada
- October 1999 Invited Speaker
Nobel Conference XXXV, “Genetics in the New Millennium”
Gustavus Adolphus College, Saint Peter, Minnesota
- May 1999 Keynote Speaker, “California Scientist of the Year 1999”
California State Science Fair
California Science Center, Los Angeles, California
- March 1999 Co-Organizer and Speaker
Cold Spring Harbor Meeting on Telomeres and Telomerase
Cold Spring Harbor Laboratories, Cold Spring Harbor, New York
- February 1999 Invited Speaker
Keystone Symposia on Molecular and Cellular Biology
Molecular Mechanisms in DNA Replication and Recombination
Taos, New Mexico
- February 1999 Co-Organizer and Co-Moderator
National Academy of Sciences Regional Meeting
University of California, San Francisco
San Francisco, California
- February 1999 Invited Speaker
National Institutes of Health Workshop
“Chromatin Transcription and DNA Replication”
Bethesda, Maryland
- August 1998 Invited Speaker
Third Congress of the Asian Pacific Organization for Cell Biology
Osaka, Japan
- August 1998 Invited Speaker and Session Moderator
Geron Symposium II: Telomerase and Telomere Dynamics in Cancer and Aging
Maui, Hawaii
- July 1998 Plenary Symposium Invited Speaker
27th Annual Meeting of the International Society for Experimental Hematology
Vancouver, BC, Canada
- July 1998 Invited Speaker

	Twelfth Symposium of the Protein Society San Diego, California
June 1998	Invited Speaker and Session Chair DNA Replication Nucleic Acids Gordon Research Conference Salve Regina University, Newport, Rhode Island
August 1997	Invited Speaker and Session Chair DNA: The 3R's - Repair, Recombination and Replication 17th International Congress of Biochemistry and Molecular Biology 1997 Annual Meeting of the American Society for Biochemistry and Molecular Biology, San Francisco, California
August 1997	Invited Speaker The Salk Institute Oncogenes & Growth Control Meeting San Diego, California
March 1997	Invited Keynote Speaker Howard Hughes Medical Institute Scientific Meeting Gene Regulation in Health and Disease Chevy Chase, Maryland
February 1997	Invited Speaker Ciba Foundation Symposium No. 211 Telomeres and Telomerase London, England
January 1997	Plenary Lecturer International Plant & Animal Genome Conference V Status of Plant & Animal Research San Diego, California
December 1996	Invited Participant and Concurrent Symposium Co-Chair 36th American Society for Cell Biology Annual Meeting San Francisco, California
November 1996	Invited Participant and Session Chair Banbury Center Conference on Telomeres and Telomerase Cold Spring Harbor, New York
October 1996	Keynote Speaker Lost Pines Molecular Biology Conference Lost Pines, Texas
August 1996	Invited Speaker Geron Telomerase and Cancer Symposium: Telomere & Telomerase Biochemistry Hawaii

July 1996	Session Chair and Invited Speaker Gordon Research Conference on Molecular Genetics Dynamics of Chromosome Maintenance Newport, Rhode Island
June 1996	Discussion Leader and Speaker FASEB Summer Research Conference Enzymes That Act on Nucleic Acids Saxtons River, Vermont
May 1996	Invited Speaker I.M.P. Spring Conference "Chromosomes" Vienna, Austria
February 1996	Invited Speaker Keystone Symposia on Molecular & Cellular Biology Molecular Mechanisms in DNA Replication and Recombination Taos, New Mexico
July 1995	Invited Speaker FASEB Summer Research Conference Ciliate Molecular Biology Meeting Copper Mountain, Colorado
June 1995	Session Chair and Invited Speaker Gordon Conference on Nucleic Acids New Hampton, New Hampshire
April 1995	Invited Speaker Department of Veterans Affairs Course in "Concepts in Molecular Medicine" San Francisco, California
April 1995	Invited Speaker Stanford University School of Medicine Symposium on "The Evolution of Genetic and Developmental Programs" Stanford, California
January 1995	Invited Plenary Speaker UCLA-Keystone Symposium on Ribozymes Keystone, Colorado
December 1994	Mini-Symposium Chair American Society for Cell Biology Meeting San Francisco, California

October 1994	Conference Co-Organizer, Session Chair and Speaker Banbury Conference on "Telomeres" Banbury Center Cold Spring Harbor Laboratory, New York
July 1994	Meeting Co-Organizer, Session Chair and Speaker Conference on Nuclear Proteins, Gene Regulation and Chromatin Title of talk "Telomeres and Telomerases" Tamarron, Colorado
July 1994	Invited Speaker Gordon Research Conference Tilton, New Hampshire
June 1993	Session Chair and Speaker Cold Spring Harbor Symposium on DNA and Chromosomes
June 1993	Invited Speaker and Plenary Lecturer ASBMB annual meeting San Diego, California
May 1993	Invited Speaker Yakult International Symposium on RNA Structure and Function Tokyo, Japan
October 1992	Invited Speaker Symposium on RNA function and metabolism Foundation for Advanced Cancer Studies Frederick, Maryland
September 1992	Symposium Session Host "Winding Your Way Through DNA" UCSF/Exploratorium-San Francisco
July 1992	Invited Speaker and Session Chair Gordon Conference on Chromatin
June 1992	Invited Speaker and Session Chair Gordon Conference on Nucleic Acids
January 1992	Invited Speaker, Plenary Session Keystone Symposium on molecular mechanisms of DNA replication and recombination, Taos, New Mexico
January 1992	National Institutes of Health General Medicine Council

October 1991	Invited Plenary Lecturer International Congress of Human Genetics Washington, D.C.
October 1991	Invited Speaker Ninth Whitehead Symposium, "Biological Functions of RNA" Massachusetts Institute of Technology, Whitehead Institute Cambridge, Massachusetts
June 1991	Invited Speaker Nucleic Acids Gordon Conference
May 1991	Session Chair and Speaker RNA Processing Meeting Cold Spring Harbor, New York
April 1991	Symposium Chair and Speaker FASEB Meeting Atlanta, Georgia
February 1991	Invited Speaker UCLA Symposium on RNA Introns and Evolution Taos, New Mexico
December 1990	Invited Session Chair and major symposium Speaker American Society for Cell Biology San Diego, California
July 1990	Speaker and Session Chair, Gordon Conference on Nuclear Protein Chromosome Structure and Gene Regulation, Tilton School New Hampshire
January 1990	Workshop on Telomeres, Hereditary Disease Foundation Santa Monica, California
December 1989	Invited Participant, "RNA Relics" Department of Biochemistry, University of California, San Francisco
September 1989	Speaker and Session Chair Chromosome Structure and Segregation, American Society for Cell Biology Conference, Airlie House, Virginia
August 1989	Speaker and Session Chair, Gordon Conference on Ciliate Molecular Genetics, Colby-Sawyer College, New Hampshire
July 1989	Commonwealth Scientific and Industrial Research Organization Division of Plant Sciences, Canberra, Australia

July 1989	Walter and Eliza Hall Institute for Medical Research Melbourne, Australia
July 1989	Keynote Speaker, 1989 Annual General Meeting, Genetics Society of Australia, Sydney, Australia
July 1989	Genetics Society of America, Atlanta, Georgia (declined)
June 1989	Gordon Conference on Extrachromosomal Elements Colby-Sawyer College, New Hampshire
April 1989	UCLA Symposium on Molecular and Cellular Biology of Yeasts and Filamentous Fungi, Steamboat Springs, Colorado (declined)
March 1989	UCLA Symposium on Molecular Mechanisms in DNA Replication and Recombination, Keystone, Colorado
March 1989	4th ICN-UCI Symposium: Protein-Nucleic Acid Interaction in Gene Expression Dana Point, California
September 1988	Cold Spring Harbor Meeting on Ribosome Synthesis Cold Spring Harbor, New York
August 1988	Speaker in Symposium and workshop sessions of XVth International Genetics Congress, Toronto, Canada
May 1988	Eli Lilly Award Address, American Society for Microbiology Meeting Miami, Florida
May 1988	Speaker in RNA Processing Session, American Society for Microbiology Meeting, Miami, Florida
April 1988	Speaker and Session Chair, UCLA Symposium on RNA-Protein Interactions Keystone, Colorado
January 1988	Symposium on Structural Biology Department of Chemistry, University of California, Berkeley
August 1987	Co-Chairperson, 2nd International Conference on Ciliate Molecular Genetics Clark-Kerr Campus Conference Center, Berkeley, California
August 1986	Fifth Summer Symposium in Molecular Biology: the Nucleus Pennsylvania State University, Pennsylvania (declined)
June 1986	38th Annual Meeting of the Society for Protozoology Kingston, Rhode Island
June 1986	Chairperson, Gordon Conference on Nucleic Acids

New Hampton School, New Hampshire

- March 1986 UCLA Symposium on Molecular Approaches to Developmental Biology
Keystone, Colorado
- January 1986 UCLA Symposium on Molecular Strategies of Parasitic Invasion
Park City, Utah
- July 1985 Speaker and Session Chair, Gordon Conference on Developmental Biology
New Hampshire
- May 1985 Cold Spring Harbor Meeting on Chromosome Structure and Expression
Cold Spring Harbor, New York
- April 1985 Symposium Speaker and Chair, FASEB Meeting
Anaheim, California
- August 1984 Satellite Symposium of the Third International Conference on Cell Biology:
Organization and Function of the Genome
Shanghai Institute of Cell Biology, Shanghai, China
- June 1984 43rd Annual Symposium of the Developmental Society on Molecular
Developmental Biology, Columbia University, New York
- May 1984 Gordon Conference on Nucleic Acids
New Hampton School, New Hampshire
- April 1984 UCLA Symposium on Genome Rearrangements
Steamboat Springs, Colorado
- Jan 1983 Arrowhead Western U.S. Genetics Meeting
Arrowhead, California
- July 1982 Ciliate Genetics and Molecular Biology Conference
Laramie, Wyoming
- June 1982 Gordon Conference on Biological Regulatory Mechanisms, New Hampshire
- June 1982 Cold Spring Harbor Symposium on DNA Structure
Cold Spring Harbor, New York

INVITED SEMINARS/LECTURES (1982–present)

- 2008** David L. Garbers Memorial Lecture, University of Texas Southwestern Medical
Center, Dallas, TX
Weizmann Women & Science Award Lecture, Tel Aviv, Israel
Weizmann Institute of Science-National postdoctoral Award Program for Advancing
Women in Science, Keynote Address, Tel Aviv, Israel
Anat Krauskopf Lecture, Tel Aviv University, Israel
Vanderbilt University Prize Lecture, Nashville, Tennessee
Womens Forums West, Invited Speaker, UCSF, San Francisco, CA

Osher Lifelong Learning Institute-UCSF 10th Annual Mini-Medical School Lecture Series, San Francisco, CA
 Albany Medical Center Prize in Medicine and Biomedical Research Lecture, Albany, NY
 Frank H. Westheimer Prize Lecture, Harvard University, Cambridge, MA
 Leaders in Biomedicine Lecture Series, Harvard university, Cambridge, MA
 New York Academy of Sciences New Vistas Lecture Series, New York, NY
 UCLA Pathology Seminar Series, Los Angeles, CA
 Heidelberg Forum Seminar, European Molecular Biology Laboratory, Heidelberg, Germany
 EMBL Distinguished Lecture Series, Heidelberg, Germany
 San Francisco State University Department of Biology Commencement Address, San Francisco, CA
 Women @ Google Lecture series, Google corporate office, San Francisco, CA
 Royal Society of New South Wales Invited Lecture, Sydney, Australia
 HMRI Cancer Research Program Public Lecture, Newcastle, NSW, Australia
 David L. Garbers Memorial Lecture, UT Southwestern University, Dallas, Texas

2007 Cold Spring Harbor Laboratories, Cold Spring Harbor, NY
 Feinstein 2007 Lecture in Molecular Medicine, Feinstein Institute, New York
 Monash University Distinguished Visiting Professorship Lecture, Australia
 Salpêtrière Hospital, INSERM, Invited Seminar, Paris, France
 Institute Jacques Monod, Invited Seminar, Paris, France
 Horwitz Prize Lecture, Columbia University, New York, NY

2006 Mendel Lecture Series, Academy of Sciences of the Czech Republic and Mendel Museum, Brno, Czech Republic
 Karolinska Research Lecture Series at the Nobel Forum, Stockholm, Sweden
 Meyenburg Prize Lecture, Heidelberg, Germany
 Peter Gruber Foundation Genetics Prize Lecture, New Orleans, Louisiana
 California Academy of Medicine Lecture, San Francisco, California
 Osher Lifelong Learning Institute-UCSF 8th Annual Mini-Medical School Lecture Series, San Francisco, California
 2006 Chipperfield Memorial Lecture, MIT Biology Department, Cambridge, Massachusetts
 Cancer Research UK, London Research Institute Special Seminar, London, England
 Norman Giles Lecture, Department of Genetics, University of Georgia, Athens, Georgia
 National Cancer Institute Alfred G. Knudson Award Lecture, Rockville, Maryland
 Fourth Annual Kirk A. Landon-AACR Prize for Basic Cancer Research Lecture, Miami, Florida

2005 Biomedical Research Council Distinguished Visiting Lecturer, Singapore
 Monash University Distinguished Visiting Professorship Lecture, Australia
 Keynote Address, Research Day, University of San Francisco School of Dentistry
 Frank and Joan Rothman Lecture, Brown University, Providence, Rhode Island
 UC Berkeley Department of Molecular and Cell Biology Graduation Commencement Keynote address, Berkeley, California
 Distinguished Woman Scientist Lecture Series, University of California, Davis, Davis, California
 Chemistry Department Student Hosted Colloquia, Stanford University, Stanford, California
 Kirk A. Landon-AACR Prize for Basic Cancer Research Lecture, Anaheim, California
 Fred Hutchinson Cancer Research Center Annual Distinguished Lecture,

- Seattle, Washington
The Gladstone Distinguished Lecture in Molecular and Cell Biology,
San Francisco, California
Radcliffe Institute for Advanced Study Science Lecture Series,
Cambridge, Massachusetts
- 2004** American Society for Cell Biology Public Service Award Lecture
Dr. A.H. Heineken Prize for Medicine Lecture, Amsterdam, The Netherlands
Erasmus Medical Center, Rotterdam, The Netherlands
- Morton I. Grossman Distinguished Lectureship, Digestive Disease Week
New Orleans, Louisiana
University of Chicago Medical Center, Chicago, Illinois
- 2003** San Francisco State University Department of Biology
Mahlon Hoagland Distinguished Lectureship, Worcester Foundation,
University of Massachusetts Medical School
Richard M. Furland Distinguished Lecturer, The Rockefeller University, New York
Cellular and Molecular Medicine/Ludwig Institute Seminar Series
University of California, San Diego, San Diego, California
The Florence S. Mahoney Memorial Lecture on Aging
National Institutes of Health/National Institute on Aging, Bethesda, Maryland
UCSF School of Medicine Dean's Research Seminar Series, San Francisco,
California
Huntsman Cancer Institute Seminar Series, Salt Lake City, Utah
- 2002** Marguerite Vogt Lecture in Cancer Biology, Salk Institute, La Jolla, California
American Chemical Society, Bay Area Chapter, San Francisco, California
Colleen Giblin Memorial Lecturer, Columbia University, New York, New York
- 2001** Baylor College of Medicine 29th Annual Verna and Marrs McLean Lecture in
Biochemistry, Houston, Texas
American Association for Cancer Research-Pezcoller International Award for
Cancer Research Lecture, New Orleans, Louisiana
44th Annual Cartwright Lecture, Columbia University, New York
Women's Faculty Organization Distinguished Women in Science and Medicine
Lecture, Northwestern University, Chicago, Illinois
Genentech Postdoctoral Seminar Series, South San Francisco, California
Memorial Sloan-Kettering Cancer Center Katharine Berkan Judd Award Lectureship
First Annual Walter and Idun Berry Symposium, Stanford School of Medicine
UCSF OB/GYN Edward Hill Endowed Lectureship, San Francisco
- 2000** Feodor Lynen Award Lecture, Miami Nature Biotechnology Winter Symposium
Miami Beach, Florida
Morehouse College Department of Biology Seminar Series, Atlanta, Georgia
Buck Center for Research in Aging, 1st Annual Research Seminar Series Novato, CA
American Association for Cancer Research-G.H.A. Clowes Memorial Award
Lecture
San Francisco, California
Dickson Prize in Medicine Award Lecture, The University of Pittsburgh,
Pittsburgh, Pennsylvania
7th Annual Don W. Fawcett Lecture in Cell Biology, Department of Cell Biology,
Harvard Medical School, Boston, Massachusetts
Fox Chase Cancer Center Distinguished Lecture, Philadelphia, Pennsylvania
"Frontiers in Gene Therapy" Lecture Series, Stanford University, Stanford, California

Department of Biology, Lake Forest College, Lake Forest, Illinois

- 1999** Harvey Prize Lecture, Technion Institute of Technology, Haifa, Israel
Passano Lecture, Johns Hopkins University, Baltimore, Maryland
Cancer Center Seminar Series, University of California San Francisco Cancer Center
Twenty-Eighth Annual Lewis S. Rosenstiel Award Lecture in Basic Medical Research, Brandeis University, Waltham, Massachusetts
1999 UCSF Graduate Division Commencement Speaker
Stanford University Department of Biology Seminar Series
“Frontiers in Developmental Biology”, Stanford, California
San Francisco Chronicle 2020 Symposium, Panel Member, San Francisco, California
43rd Annual UCLA School of Medicine Lecture Series, Los Angeles, California
Keio Medical Science Prize Commemorative Lecture and Seminar
The Porter Lecture, American Society for Cell Biology 39th Annual Meeting
- 1998** University of California at San Francisco, San Francisco General Hospital
Gladstone Institute of Virology and Immunology Seminar Series
University of Texas Southwestern Medical Center
Southwest Medical Foundation Visiting Professor
Mount Sinai School of Medicine, Dean’s Lecture Series
Dorothy H. and Lewis Rosenstiel Department of Biochemistry
Ada Doisy Lecture in Biochemistry, Department of Biochemistry
University of Illinois, Urbana-Champaign
The Gairdner Foundation International Awards Seminars and Lectures, Toronto, Canada
Panel Member, Women Faculty Leadership Seminar Series, UC, San Francisco
Charles B. Smith Visiting Professor Seminar Series, Department of Medicine
The Molecular Biology Program, Memorial Sloan-Kettering Cancer Center
Charles-Léopold Mayer Award Lecture, Academie Des Sciences, Paris, France
Curie Institute, Paris, France
- 1997** University of California at Santa Barbara
ACS Distinguished Lecture Series
University of Colorado, Boulder, Department of Chemistry and
Biochemistry, Biochemistry Seminar Series
California Institute of Technology, Department of Biology Seminar Series
Wadsworth Center, New York State, The Brown-Hazen Lecture Series
University of California at Berkeley, Department of Molecular and Cell Biology
Seminar Series
UCSF San Francisco General Hospital, Cellular and Molecular Medicine Seminar Series
Lawrence Berkeley National Laboratory, Life Sciences Division Seminar Series
University of California at San Francisco, Dean’s Research Seminar Series
- 1996** New York University School of Medicine 1995-96 Honors Program Lecture Series
The Scripps Research Institute, Distinguished Lecture Series, La Jolla, California
The University of British Columbia, Department of Zoology
Special Lecture Series, Vancouver, B.C. Canada
University of Chicago, Cancer Research Foundation, Simon M. Shubitz Cancer Lecture
National Institutes of Health, Division of Research Grants
50 Years of Peer Review 1946-1996, Bethesda, Maryland
San Francisco State University, Department of Biology
- 1995** Roche Molecular Systems, Alameda, California
Medical Scientist Lecture Series, UC, Irvine
The Rockefeller University, New York
National Center for Human Genome Research (NIH), Bethesda

University of Tasmania, Hobart, Tasmania, Australia
David W. Beach Memorial Lectureship in Biochemistry, Purdue University
Distinguished Lecture Series on Molecular Biology in Medicine,
Center for Advanced Biotechnology and Medicine, UMD New Jersey

- 1994** Damon Runyon Symposium, UCSF, Laurel Heights
Molecular Cytometry Division, UCSF, MCB
Department of Molecular & Cellular Biology, UC, Berkeley
Veterans Administration Medical Center, UCSF
Terrapin Biotechnology Corporation, San Francisco
Reed College, Portland, Oregon
Department of Biological Chemistry, UCLA
- 1993** Department of Microbiology, Stanford University
University of Missouri, Columbia
Department of Biology, Massachusetts Institute of Technology
Department of Biology, Marquette University, Milwaukee, Wisconsin
Department of Microbiology and Immunology, Duke University, North Carolina
Department of Biophysics, Kyoto University, Japan
Lecturer, Brown Bag Lecture Series, UCSF
- 1992** University of Pennsylvania School of Medicine, Philadelphia
Fifth Bernard Cohen Memorial Lecture in Genetics
Department of Molecular Biophysics and Biochemistry, Yale University
Fromm Institute for Lifelong Learning, University of San Francisco
- 1991** Department of Biology, University of California, Santa Cruz
Department of Biological Sciences, University of California, Santa Barbara
Frederick Hutchinson Cancer Research Center, Seattle, Washington
Institute of Molecular Biology, Eugene, Oregon
Department of Biological Sciences, Stanford University, California
Department of Biochemistry and Molecular Biology, Harvard University,
Cambridge, Massachusetts
Department of Biology, University of Utah, Salt Lake City
Sonneborn Lectureship, Department of Biology, Indiana University
Bloomington, Indiana
Plant Gene Expression Center, United States Department of Agriculture, Albany,
CA
Department of Pathology, University of Southern California
- 1990** Department of Microbiology and Molecular Genetics
University of California, Irvine
Department of Biological Chemistry, University of California, Los Angeles
Cellular and Developmental Biology, Harvard University
Department of Biochemistry, Albert Einstein University, New York
Harvey Society Lecturer, Harvey Society, New York
DeWitt Stetten, Jr., Lecturer, HH, Bethesda, Maryland
Howard A. Schneiderman Lectureship, Monsanto Company, St. Louis, Missouri
- 1989** Department of Developmental Biology, Stanford University, California
Department of Genetics, La Trobe University, Melbourne, Australia
Department of Genetics, Monash University, Melbourne, Australia
Department of Biochemistry, University of Adelaide, Adelaide, Australia
Department of Genetics, University of Melbourne, Melbourne, Australia
Department of Biology, Massachusetts Institute of Technology, Cambridge, Mass.

Faculty of Science, York University, Ontario, Canada

- 1988** Department of Biological Sciences, University of California, Santa Cruz
Department of Biology, Sloan Kettering Institute, New York
Department of Biology, Yale University, New Haven Connecticut
Department of Molecular Biology, University of California, Berkeley
Department of Molecular Genetics, University of Chicago, Chicago, Illinois
Walter and Eliza Hall Institute for Medical Research, Melbourne, Australia
Department of Biochemistry and Biophysics, University of California, San Francisco
Department of Microbiology, University of Michigan, Ann Arbor, Michigan
Department of Biology, University of California, San Diego, California
Department of Biochemistry, Baylor College of Medicine, Houston, Texas
- 1987** Department of Biology, California Institute of Technology, Pasadena, California
Department of Biochemistry, Stanford University Medical School
- 1986** University of Wisconsin, Madison, Department of Biochemistry
- 1985** Department of Biochemistry, University of Alabama Medical School,
Birmingham, Alabama
Department of Biology, Washington University, St. Louis, Missouri
Department of Genetics, University of Washington, Seattle, Washington
Advanced Genetic Sciences, Oakland, California
Department of Molecular Biology, Massachusetts General Hospital
Harvard Medical School, Boston, Massachusetts
Department of Biochemistry Seminar, University of Texas Health Center
University Lecture Series, University of Texas Health Center, Dallas, Texas
University of Southern California, Department of Molecular Biology,
Department of Biology, Rochester, New York
University of Colorado, Boulder, Colorado
Department of Molecular, Cellular and Developmental Biology
Walter and Eliza Hall Institute for Medical Research, Melbourne, Australia
University of California, San Francisco. Department of Biochemistry and Biophysics
- 1984** Department of Biochemistry, Duke University, Durham North Carolina
Department of Biochemistry, University of Chicago, Chicago, Illinois
Department of Biology, Peking University, Beijing, China
Department of Microbiology, Stanford University, Stanford, California
- 1983** Cetus Corporation, Emeryville, California
Department of Biochemistry, University of California, Berkeley
Department of Biological Sciences, Harvard Medical School, Boston, Massachusetts
Department of Biology, Brandeis University, Waltham, Massachusetts
Department of Biological Sciences, University of California, Santa Cruz
Department of Biochemistry and Biophysics, University of California, San Francisco
Hutchinson Research Center, Seattle, Washington
Chiron Corporation, Emeryville, CA
Rutgers University, Piscataway, New Jersey
Distinguished Lecture Series on Molecular Biology in Medicine
Department of Biochemistry, New York University School of Medicine
Department of Biological Sciences, Cornell University, New York
University of Colorado, Boulder, Colorado
- 1982** University of California, Davis, California
Department of Biological Sciences

University of California, Santa Barbara, California
Department of Developmental and Molecular Biology
University of California, Irvine
Cold Spring Harbor Laboratory, Cold Spring Harbor, New York
Department of Microbiology
University of Illinois, Champaign-Urbana, Illinois

PUBLICATIONS:

Papers published in refereed scientific journals

1. Davidson, B.E., E.H. Blackburn and T.A.A. Dopheide. Chorismate mutase-prephenate dehydratase from *Escherichia coli* K-12. I. Purification, molecular weight, and amino acid composition. *J. Biol. Chem.* **241**: 4441–4446 (1972).
2. Blackburn, E.H. and F.J. R. Hird. Metabolism of glutamine and glutamate by rat liver mitochondria. *Arch. Biochem. Biophys.* **152**: 258–264 (1972).
3. Blackburn, E.H., F.J.R. Hird and I.K. Jones. Metabolism of glutamine and ammonia in rat liver: the effects of N-acetylglutamate and phosphate. *Arch. Biochem. Biophys.* **152**: 265–271 (1972).
4. E.H. Blackburn. Transcription by *Escherichia coli* RNA polymerase of a single-stranded fragment by bacteriophage 174 DNA 48 residues in length. *J. Mol. Biol.* **93**: 367–374 (1975).
5. Air, G.A., E.H. Blackburn, F. Sanger and A.R. Coulson. The nucleotide and amino acid sequences of the N (5') terminal region of gene G of bacteriophage ϕ X174. *J. Mol. Biol.* **96**: 703–719 (1975).
6. E.H. Blackburn. Transcription and sequence analysis of a fragment of bacteriophage 174 DNA. *J. Mol. Biol.* **107**: 417–431 (1976).
7. Air, G.M., E.H. Blackburn, A.R. Coulson, F. Gailbert, F. Sanger, J.W. Sedat and E.B. Ziff. Gene F. of bacteriophage ϕ X174. Correlation of nucleotide sequences from the DNA and amino acid sequences from the gene product. *J. Mol. Biol.* **107**: 445–458 (1976).
8. Blackburn, E.H. and J.C. Gall. A tandemly repeated sequence at the termini of the extrachromosomal ribosomal RNA genes in *Tetrahymena*. *J. Mol. Biol.* **120**: 33–53 (1978).
9. Pan, W.-C. and E.H. Blackburn. Single extrachromosomal ribosomal RNA gene copies are synthesized during amplification of the rDNA in *Tetrahymena*. *Cell* **23**: 459–466 (1981).
10. Blackburn, E.H. and S.-S. Chiou. Non-nucleosomal packaging of a tandemly repeated DNA sequence at termini of extrachromosomal DNA coding for rRNA in *Tetrahymena*. *Proc. Natl. Acad. Sci. USA* **78**: 2263–2267 (1981).
11. Katzen, G.M., G.M. Cann and E.H. Blackburn. Sequence-specific fragmentation of macronuclear DNA in a holotrichous ciliate. *Cell* **24**: 313–320 (1981).
12. Yao, M.-C., E.H. Blackburn and J. Gall. Tandemly repeated C-C-C-C-A-A hexanucleotide of *Tetrahymena* rDNA is present elsewhere in the genome and may be related to the alteration of the somatic genome. *J. Cell Biol.* **90**: 515–520 (1981).
13. Pan, W.-C., E. Orias, M. Flacks and E.H. Blackburn. Allele-specific, selective amplification of a ribosomal RNA gene in *Tetrahymena thermophila*. *Cell* **28**: 596–604 (1982).
14. Szostak, J.W. and E.H. Blackburn. Cloning yeast telomeres on linear plasmid vectors. *Cell* **29**: 245–255 (1982).

15. Blackburn, E.H., W.-C. Pan and C. Johnson. Methylation of ribosomal RNA genes in *Tetrahymena thermophila* Nucl. Acids Res. **11**: 5131–5145 (1983).
16. Blackburn, E.H. and P.B. Challoner. Identification of a telomeric DNA sequence in *Trypanosoma brucei*. Cell **36**: 447–457 (1984).
17. Shampay, J., J.W. Szostak and E.H. Blackburn. DNA sequences of telomeres maintained in yeast. Nature **310** : 154–157 (1984).
18. Bruns, P., A.L. Katzen, L. Martin and E.H. Blackburn. A drug resistant mutation in the Ribosomal DNA of *Tetrahymena*. Proc. Natl. Acad. Sci. USA **82**: 2844–2846 (1985).
19. Spangler, E. and E.H. Blackburn. The nucleotide sequence of the 17S ribosomal RNA gene of *Tetrahymena thermophila* and the identification of point mutations resulting in resistance to the antibiotics Paromomycin and Hygromycin. J. Biol. Chem. **260**: 6334–6340 (1985).
20. Howard, E.A. and E.H. Blackburn. Reproducible and variable genomic rearrangements occur in the developing somatic nucleus of the ciliate *Tetrahymena thermophila*. Molec. Cell. Biol. **5**: 2039–2050 (1985).
21. Challoner, P.B., A.A. Amin, R.E. Pearlman and E.H. Blackburn. Conserved arrangements of repeated DNA sequences in the nontranscribed spacers of ciliate ribosomal RNA genes: Evidence for molecular coevolution. Nucl. Acids Res. **13**: 2661–2680 (1985).
22. Greider, C.W. and E.H. Blackburn. Identification of a specific telomere terminal transferase activity in *Tetrahymena* extracts. Cell **43**: 405–413 (1985).
23. Cherry, J.M. and E.H. Blackburn. The internally located telomeric sequences in the germline chromosomes of *Tetrahymena* are at the conserved ends of a family of DNA elements. Cell **43**: 747–758 (1985).
24. Budarf, M.L. and E.H. Blackburn. Chromatin structure of the telomeric region and 3' nontranscribed spacer of *Tetrahymena* ribosomal RNA genes. J. Biol. Chem. **261**: 363–369 (1986).
25. Challoner, P.B. and E.H. Blackburn. Conservation of sequences adjacent to the telomeric C4A2 repeats of ciliate macronuclear ribosomal RNA gene molecules. Nucl. Acids Res. **14**: 6299–6311 (1986).
26. Larson D.D., E.H. Blackburn, P.C. Yaeger and E. Orias. Control of rDNA Replication in *Tetrahymena* involves a *cis*-Acting Upstream Repeat of a Promoter Element. Cell **47**: 229–240 (1986).
27. Budarf, M.L. and E.H. Blackburn. S1 Nuclease sensitivity of a double-stranded telomeric DNA sequence. Nucl. Acids Res. **15**: 6273–6292 (1987).
28. Larson, D.D., E.A. Spangler and E.H. Blackburn. Dynamics of telomere length variation in *Tetrahymena thermophila*. Cell **50**: 477–483 (1987).
29. Greider, C.W. and E.H. Blackburn. The telomere terminal transferase of *Tetrahymena* is a ribonucleoprotein enzyme with two distinct primer specificity components. Cell **51**: 887–898 (1987).
30. Henderson, E., C.C. Hardin, Steven K. Wolk, I. Tinoco, Jr. and E.H. Blackburn. Telomeric DNA oligonucleotides form novel intramolecular structures containing guanine-guanine base pairs. Cell **51**: 899–908 (1987).

31. Forney, J., E.R. Henderson and E.H. Blackburn. Identification of the telomeric sequence of the acellular slime molds *Didymium iridis* and *Physarum polycephalum*. Nucl. Acids Res. **15**: 9143–9152 (1987).
32. Forney, J.D. and E.H. Blackburn. Developmentally controlled telomere addition in wild type and mutant paramecia. Mol. Cell. Biol. **8**: 251–258 (1988).
33. Shampay, J. and E.H. Blackburn. Generation of telomere length heterogeneity in *S. cerevisiae*. Proc. Natl. Acad. Sci. USA **85**: 534–538 (1988).
34. E. Orias, D. Larson, Y.-F. Hu, G.-L. Yu, J. Karttunen, A. Løvlie, B. Haller and E.H. Blackburn. Replacement of the macronuclear ribosomal RNA genes of a mutant *Tetrahymena* using electroporation. Gene **70**: 295–301 (1988).
35. Spangler, E.A., T. Ryan and E.H. Blackburn. Developmentally regulated telomere addition in *Tetrahymena thermophila*. Nucl. Acids Res. **16**: 5569–5585 (1988).
36. Yu, G.-L., M. Hasson and E.H. Blackburn. Circular ribosomal DNA plasmids transform *Tetrahymena thermophila* by homologous recombination with endogenous macronuclear ribosomal DNA. Proc. Natl. Acad. Sci. USA **85**: 5151–5155 (1988).
37. Henderson, E.R. and E.H. Blackburn. An Overhanging 3' terminus is a conserved feature of telomeres. Mol. Cell. Biol. **9**: 345–348 (1989).
38. Greider, C.W. and E.H. Blackburn. A telomeric sequence in the RNA of *Tetrahymena* telomerase required for telomere repeat synthesis. Nature **337**: 331–337 (1989).
39. Yaeger, P.C., E. Orias, W.-L. Shaiu, D.D. Larson and E.H. Blackburn. The replication advantage of a free linear rRNA gene is restored by somatic recombination in *Tetrahymena thermophila*. Mol. Cell. Biol. **9**: 452–460 (1989).
40. Shippen-Lentz, D. and E. H. Blackburn. Telomere terminal transferase activity from *Euplotes crassus* adds large numbers of TTTTGGGG repeats onto telomeric primers. Mol. Cell. Biol. **9**: 2761–2764 (1989).
41. Shampay, J. and E.H. Blackburn. *Tetrahymena* micronuclear sequences that function as telomeres in yeast. Nucl. Acids Res. **17**: 3247–3260 (1989).
42. Phan, H.L., J. Forney and E.H. Blackburn. Analysis of *Paramecium* macronuclear DNA using pulsed field gel electrophoresis. J. Protozoology **36**: 402–408 (1989).
43. Robinson, E.K., P.D. Cohen and E.H. Blackburn. A novel DNA deletion-ligation reaction catalyzed in vitro by a developmentally controlled activity from *Tetrahymena* cells. Cell **58**: 887–900 (1989).
44. Yu, G.-L. and E.H. Blackburn. Transformation of *Tetrahymena thermophila* with a mutated circular ribosomal DNA plasmid vector. Proc. Natl. Acad. Sci. USA **86**: 8487–8491 (1989).
45. Blackburn, E.H., C.W. Greider, E. Henderson, M.S. Lee, J. Shampay, and D.-Shippen-Lentz. Recognition and elongation of telomeres by telomerase. Genome **31**: 553–560 (1989).
46. Shippen-Lentz, D. and E. H. Blackburn. Functional evidence for an RNA template in telomerase. Science **247**: 546–552 (1990).
47. Yu, G.-L., J.D. Bradley, L.D. Attardi and E.H. Blackburn. *In vivo* alteration of telomere sequences

- and senescence caused by mutated *Tetrahymena* telomerase RNAs. *Nature* **344**: 126–132 (1990).
48. Blackburn, E.H. and V. Lundblad. RNA-dependent polymerase motifs in the EST1 protein: tentative identification of a component of an essential yeast telomerase. *Cell* **60**: 529–530 (1990).
 49. Yu, G.-L. and E.H. Blackburn. Amplification of tandemly repeated origin control sequences confers a replication advantage on rDNA replicons in *Tetrahymena thermophila*. *Mol. Cell. Biol.* **10**: 2070–2080 (1990).
 50. Romero, D. and E.H. Blackburn. A conserved secondary structure for telomerase RNA. *Cell* **67**: 343–353 (1991).
 51. Yu, G.-L. and E.H. Blackburn. Developmentally programmed chromosome healing by telomerase in *Tetrahymena*. *Cell* **67**: 823–832 (1991).
 52. Wyman, C. and E.H. Blackburn. Tel-1 transposon-like elements of *Tetrahymena thermophila* are associated with micronuclear genome rearrangements. *Genetics* **128**: 57–67 (1991).
 53. Lundblad, V. and E.H. Blackburn. An alternate pathway for yeast telomere maintenance rescues *est1⁻* senescence. *Cell* **73**: 347–360 (1993).
 54. Lee, M. and E.H. Blackburn. Sequence-specific DNA primer effects on telomerase polymerization activity. *Mol. Cell. Biol.* **13**: 6586–6599 (1993).
 55. Shippen, D.E., E.H. Blackburn and C.M. Price. DNA bound by the *Oxytricha* telomere protein is accessible to telomerase and other DNA polymerases. *Proc. Natl. Acad. Sci. USA* **91**: 405–409 (1994).
 56. Kapler, G.M. and E.H. Blackburn. A weak germline excision mutation blocks developmentally-controlled amplification of the rDNA minichromosome of *Tetrahymena thermophila*. *Genes Dev.* **8**: 84–95 (1994).
 57. Gilley, D. and E.H. Blackburn. Lack of telomere shortening during senescence in *Paramecium*. *Proc. Natl. Acad. Sci. USA* **91**: 1955–1958 (1994).
 58. McEachern, M.J. and E.H. Blackburn. A conserved sequence motif within the exceptionally diverse telomeric sequenced of budding yeasts. *Proc. Natl. Acad. Sci. USA* **91**: 3453–3457. (1994).
 59. Kapler, G.M., E. Orias and E.H. Blackburn. *Tetrahymena thermophila* mutants defective in the developmentally programmed maturation and maintenance of the rDNA minichromosome. *Genetics* **137**: 455–466 (1994).
 60. Strahl, C. and E.H. Blackburn. The effects of nucleotide analogs on telomerase and telomeres in *Tetrahymena*. *Nuc. Acids Res.* **22**: 893–900. (1994)
 61. Bhattacharyya, A. and E.H. Blackburn. Architecture of telomerase RNA. *EMBO J.* **13**: 5721–5731 (1994).
 62. Kirk, K., and E.H. Blackburn. An unusual sequence arrangement in the telomeres of the germ-line micronucleus in *Tetrahymena thermophila*. *Genes Dev.* **9**: 59–71 (1995).
 63. Romero, D.P. and E.H. Blackburn. Circular rDNA replicons persist in *Tetrahymena thermophila* transformants synthesizing GGGGTC telomeric repeats. *J. Eukaryotic Micro.* **42**: 32–43 (1995).

64. Pan, W-J. and E.H. Blackburn. Tandem Repeats of the 5' Non-transcribed Spacer of *Tetrahymena* rDNA Function as high copy number autonomous replicons in the macronucleus but do not prevent rRNA gene dosage regulation. *Nuc. Acids Res.* **23**: 1561–1569. (1995).
65. Pan, W-J., R.C. Gallagher and E.H. Blackburn. Replication of an rDNA origin plasmid in the *Tetrahymena* macronucleus is prevented by transcription through the origin from an RNA polymerase I promoter. *Mol. Cell. Biol.* **15**: 3372–3381 (1995).
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COMMENTARIES AND OP-EDS

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