

The Johns Hopkins University School of Medicine

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**Carol W. Greider, Ph.D.**

03/26/07

**Demographic Information**

Professor and Director  
 Department of Molecular Biology and Genetics  
 The Johns Hopkins University School of Medicine  
 603 PCTB  
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 Baltimore, MD 21205  
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 (410) 955-0831 (fax)

**Education and Training:**

B.A. in 1983 from University of California, Santa Barbara (Biology)  
 Ph.D. in 1987 from University of California, Berkeley (Molecular Biology)

**Professional Experience:**

Cold Spring Harbor Fellow	1988-1990
Assistant Investigator, Cold Spring Harbor Laboratory	1990-1992
Associate Investigator, Cold Spring Harbor Laboratory	1992-1994
Investigator, Cold Spring Harbor Laboratory	1994-1997
Associate Professor, The Johns Hopkins University School of Medicine	1997-1999
Professor, The Johns Hopkins University School of Medicine	1999-2003
Professor of Oncology	2001-present
Interim Director, Department of Molecular Biology & Genetics, The Johns Hopkins University School of Medicine	2002-2003
Daniel Nathans Professor and Director Department of Molecular Biology and Genetics The Johns Hopkins University School of Medicine	2003-present

**Research Activities: Peer Reviewed Publications**

1. Greider, C.W., and Blackburn, E.H. (1985). Identification of a specific telomere terminal transferase activity in *Tetrahymena* extracts. *Cell* 43: 405-413.
2. Greider, C.W. and Blackburn, E.H. (1987). The telomere terminal transferase of *Tetrahymena* is a ribonucleoprotein enzyme with two kinds of primer specificity. *Cell* 51: 887-898.
3. Greider, C.W., and Blackburn, E.H. (1989). A telomeric sequence in the RNA of *Tetrahymena* telomerase required for telomere repeat synthesis. *Nature* 337: 331-337.
4. Harley, C.B., Futcher, A.B., and Greider, C.W. (1990). Telomeres shorten during ageing of human fibroblasts. *Nature* 345: 458-460.

5. Harrington, L.A., and Greider, C.W. (1991). Telomerase primer specificity and chromosome healing. *Nature* 353: 451-454.
6. Greider, C.W. (1991). Telomerase is processive. *Mol. Cell Biol.* 11: 4572-4580.
7. Allsopp, R.C., Vaziri, H., Patterson, C., Goldstein, S., Younglai, E.V., Futcher, A.B., Greider, C.W., and Harley, C.B. (1992). Telomere length predicts the replicative capacity of human fibroblasts. *Proc. Natl. Acad. Sci. U.S.A.* 89: 10114-10118.
8. Levy, M.Z., Allsopp, R.C., Futcher, A.B., Greider, C.W., and Harley, C.B. (1992). Telomere end replication problem and cell aging. *J. Mol. Biol.* 225: 951-960.
9. Counter, C.M., Avilion, A.A., LeFeuvre, C.E., Stewart, N.G., Greider, C.W., Harley, C.B., and Bacchetti, S. (1992). Telomere shortening associated with chromosome instability is arrested in immortal cells which express telomerase activity. *EMBO J.* 11: 1921-1929.
10. Avilion, A.A., Harrington, L.A., and Greider, C.W. (1992). *Tetrahymena* telomerase RNA levels increase during macronuclear development. *Dev. Genet.* 13: 80-86.
11. Collins, K. and Greider C.W. (1993). *Tetrahymena* telomerase catalyzes nucleolytic cleavage and nonprocessive elongation. *Genes Dev.* 7: 1364-1376.
12. Prowse, K.R., Avilion, A.A., and Greider, C.W. (1993). Identification of a nonprocessive telomerase activity from mouse cells. *Proc. Natl. Acad. Sci. U.S.A.* 90: 1493-1497.
13. Mantell, L.L., and Greider, C.W. (1994). Telomerase activity in germline and embryonic cells of *Xenopus*. *EMBO J.* 13: 3211-3217.
14. Autexier, C., and Greider, C.W. (1994). Functional reconstitution of wild-type and mutant *Tetrahymena* telomerase. *Genes Dev.* 8: 563-575.
15. Collins, K., and Greider, C.W. (1995). Utilization of ribonucleotides and RNA primers by *Tetrahymena* telomerase. *EMBO J.* 14: 5422-5432.
16. Autexier, C., and Greider, C.W. (1995). Boundary elements of the *Tetrahymena* telomerase RNA template and alignment domains. *Genes & Dev.* 9: 2227-2239.
17. Blasco, M.A., Funk, W., Villeponteau, B., and Greider, C.W. (1995). Functional characterization and developmental regulation of the mouse telomerase RNA. *Science* 269: 1267-1270.
18. Feng, J., Funk, W.D., Wang, S.-S., Weinrich, S.L., Avilion, A.A., Chiu, C.-P., Adams, R.R., Chang, E., Allsopp, R.C., Yu, J., Le, S., West, M.D., Harley, C.B., Andrews, W.H., Greider, C.W., and Villeponteau, B. (1995). The RNA component of human telomerase. *Science* 269: 1236-1241.
19. Collins, K., Kobayashi, R., and Greider, C.W. (1995). Purification of *Tetrahymena* telomerase and cloning of genes encoding the two protein components of the enzyme. *Cell* 81: 677-686.

20. Prowse, K.R., and Greider, C.W. (1995). Developmental and tissue specific regulation of mouse telomerase and telomere length. *Proc. Natl. Acad. Sci. U.S.A.* 92: 4818-4822.
21. Harrington, L.A., Hull, C., Crittenden, J., and Greider, C.W. (1995). Gel shift and UV cross-linking analysis of *Tetrahymena* telomerase. *J. Biol. Chem.* 270: 8893-8901.
22. Blasco, M., Rizen, M., Greider, C.W., and Hanahan, D. (1996). Differential regulation of telomerase activity and telomerase RNA during multi-stage tumorigenesis. *Nat. Genet.* 12: 200-204.
23. Avilion, A.A., Piatyszek, M. A., Gupta, J., Shay, J.W., Bacchetti, S., and Greider, C.W. (1996). Human telomerase RNA and telomerase activity in immortal cell lines and tumor tissues. *Cancer Res.* 56: 645-650.
24. Buchkovich, K.J., and Greider, C.W. (1996). Telomerase regulation during entry into the cell cycle in normal human T cells. *Mol. Biol. Cell* 7: 1443-1454.
25. Autexier, C., Pruzan, R., Funk, W., and Greider, C.W. (1996). Reconstitution of human telomerase activity and identification of a minimal functional region of the human telomerase RNA. *EMBO J.* 15: 5928-5935.
26. Blasco, M.A., Lee, H.-W., Hande, P.M., Samper, E., Lansdorp, P.M., DePinho, R.A., and Greider, C.W. (1997). Telomere shortening and tumor formation by mouse cells lacking telomerase RNA. *Cell* 91: 25-34.
27. Hinkley, C.S., Blasco, M.A., Funk, W.D., Feng, J., Villeponteau, B., Greider, C.W., and Herr, W. (1998). The mouse telomerase RNA 5'-end lies just upstream of the telomerase template sequence. *Nucleic Acids Res.* 26: 532-536.
28. Le, S., Zhu, J.J., Anthony, D.C., Greider, C.W., and Black, P.M. (1998). Telomerase activity in human gliomas. *Neurosurgery* 42: 1120-1125.
29. Autexier, C.A., and Greider, C.W. (1998). Mutational analysis of the *Tetrahymena* telomerase RNA: Identification of residues affecting telomerase activity in vitro. *Nucleic Acids Res.* 26: 787-795.
30. Lee, H.-W., Blasco, M.A., Gottlieb, G.J., Horner, J.W., Greider, C.W., and DePinho, R.A. (1998). Essential role of mouse telomerase in highly proliferative organs. *Nature* 392: 569-574.
31. Rudolph, K.L., Chang, S., Lee, H.-W., Blasco, M., Gottlieb, G., Greider, C.W., and DePinho, R.A. (1999). Longevity, stress response, and cancer in aging telomerase deficient mice. *Cell* 96: 701-712.
32. Le, S., Moore, J.K., Haber, J.E., and Greider, C.W. (1999). *RAD51* and *RAD50* define two pathways that collaborate to maintain telomeres in the absence of telomerase. *Genetics* 152: 143-152.
33. Greenberg, R., Chin, L., Femino, A., Lee, K.-H., Gottlieb, G., Singer, R., Greider, C.W., and DePinho, R.A. (1999). Short telomeres impair tumorigenesis in the *INK4a*<sup>D2/3</sup>/*-* mTR/*-* cancer-prone mouse. *Cell* 97: 515-525.

34. Chin, L., Artandi, S., Shen, Q., Tam, S., Lee, S.-L., Gottlieb, G., Greider, C.W., and DePinho, R.A. (1999). p53 deficiency rescues the adverse effects of telomere loss in vivo and cooperates with telomere dysfunction to accelerate carcinogenesis. *Cell* 97: 527-538.
35. Hemann, M.T., and Greider, C.W. (1999). G-strand overhangs on telomeres in telomerase deficient mouse cells. *Nucleic Acids Res.* 27: 3964-3969.
36. Le, S., Sternglanz, R., and Greider, C.W. (2000). Identification of two RNA binding proteins associated with human telomerase RNA. *Mol. Biol. Cell.* 11: 999-1010.
37. Chen, J.-L., Blasco, M., and Greider, C.W. (2000). A Secondary structure of vertebrate telomerase RNA. *Cell* 100: 503-514.
38. Hemann, M. T., and Greider, C. W. (2000). Wild derived inbred mouse strains have short telomeres, *Nucleic Acids Res.* 28: 4474-4478.
39. Chen, Q., Ijpm, A., and Greider, C. W. (2001). Two survivor pathways that allow growth in the absence of telomerase are generated by distinct telomere recombination events. *Mol. Cell Biol.* 21: 1819-1827.
40. Hemann, M. T., Rudolph, L., Strong, M., DePinho, R. A., Chin, L., and Greider, C. W. (2001). Telomere dysfunction triggers developmentally regulated germ cell apoptosis. *Mol. Biol. Cell.* 12: 2023-2030.
41. Hackett, J., Feldser, D.M., and Greider, C. W. (2001). Telomere dysfunction increases mutation rate and genomic instability. *Cell* 106: 275-286.
42. Hemann, M. T., Strong, M., Hao, L.-Y., and Greider, C. W. (2001). The shortest telomere, not average telomere length, is critical for cell viability and chromosome stability. *Cell* 107: 66-77.
43. Mason, D., Autexier, C., and Greider, C. W. (2001). Tetrahymena proteins p80 and p95 are not core telomerase components. *Proc. Natl. Acad. Sci. U.S.A.* 98: 12368-12373.
44. Chen, J.-L., Opperman, K. K., and Greider, C. W. (2002). A critical stem loop structure in the CR4-CR5 domain of mammalian telomerase RNA. *Nucleic Acids Res.* 30: 592-597.
45. Hathcock, K. S., Hemann, M. T., Opperman, K. K., Strong, S. A., Greider, C. W., and Hodes, R. J. (2002). Haploinsufficiency of mTR results in defects in telomere elongation. *Proc. Natl. Acad. Sci. U.S.A.* 99: 3591-3596.
46. Ijpm, A., and Greider, C.W. (2003). Short telomeres induce a DNA damage response in *S. cerevisiae*. *Mol. Biol. Cell* 14: 987-1001.
47. Mason, D., Goneska, E., and Greider, C. W. (2003). Stem loop IV of *Tetrahymena* telomerase stimulates processivity in trans. *Mol. Biol. Cell* 23: 5606-5613
48. Chen, J.-L. and Greider, C.W. (2003). Determinants in mammalian telomerase RNA that mediate enzyme processivity and cross species incompatibility. *Embo. J.* 22: 304-314.

49. Hackett, J. and Greider C.W. (2003). End resection initiates genomic instability in the absence of telomerase. *Mol. Cell. Biol* 23: 8450-8461.
50. Chen, J.-L., and Greider, C.W. (2003) Template boundary definition in mammalian telomerase. *Genes Dev.* 17: 2747-2752.
51. Qi, L., Strong, M., Karim, B. O., Huso, D. L., and Greider, C. W. (2003). Short telomeres and loss of ATM synergistically increase telomere dysfunction and suppress tumorigenesis. *Cancer Research* 63: 8188-8196.
52. Hao, L.-Y, and Greider, C.W. (2004). Genomic instability in both wildtype and telomerase-null MEFs. *Chromsoma* 113: 62-68.
53. Hao, L.-Y., and Greider, C. W. (2004). Phosphorylation of H2AX at short telomeres in T cells and fibroblasts. *J. Biol. Chem.* 43: 45148-45154.
54. Qi, L., Strong, M., Karim, B. O., Huso, D. L., and Greider, C. W. (2005). Telomere fusion to chromosome breaks reduced oncogenic translocations and tumor formation. *Nat. Cell Biol.* 7: 706-711.
55. Chen, J.-L., and Greider, C. W. (2005). Functional analysis of the pseudoknot structure in human telomerase RNA. *Proc. Natl. Acad. Sci. U.S.A.* 102: 8080-8085.
56. Armanios, M., Chen, J.-L., Chang, C. C., Brodsky, R. A., Hawkins, A., Griffen, C. A., J.R., E., Cohen, A. R., Chakravarti, A., Hamosh, A., and Greider, C. W. (2005). Haploinsufficiency of hTERT leads to anticipation in autosomal dominant dyskeratosis congenita. *Proc. Natl. Acad. Sci. U.S.A.* 102: 15960-15964.
57. Hao, L. Y., Armanios, M., Strong, M. A., Karim, B., Feldser, D. M., Huso, D., and Greider, C. W. (2005). Short Telomeres, even in the Presence of Telomerase, Limit Tissue Renewal Capacity. *Cell* 123: 1121-1131.
58. Feldser, D., Strong, M., and Greider, C.W. (2006) Ataxia telangiectasia mutated (Atm) is not required for telomerase-mediated elongation of short telomeres. *Proc. Natl. Acad. Sci. U.S.A.* 103: 2249-2251.
59. Frank, C. J., Hyde, M., and Greider, C. W. (2006). Regulation of telomere elongation by the cyclin-dependent kinase CDK1. *Mol Cell*, 24: 423-432.
60. Feldser, D., and Greider, C. W. (2007). Short telomeres limit tumor progression in vivo by inducing senescence. *Cancer Cell: in press*
61. Armanios, Y.M., Chen, J.-L., Cogan, J.D., Alder, J.K., Ingersoll, R.G., Markin, C., Lawson, W.E., Xiw, M., Vulto, I., Phillips, J.A., Lansdorp, P.M., Greider, C.W., and Loyd, J.E. (2007). Telomerase Mutations in Families with Idiopathic Pulmonary Fibrosis. *New England Journal of Medicine in press.*

**Reviews and Book Chapters:**

1. Henderson, E., Larson, D., Melton, W., Shampay, J., Spangler, E., Greider, C.W., Ryan, T., and Blackburn, E.H. Structure, synthesis and regulation of telomeres. (1988) In: *Cancer Cells 6: Eukaryotic DNA Replication*. Cold Spring Harbor Laboratory. vol 6: 453-461.
2. Blackburn, E.H., Greider, C.W., Henderson, E., Lee, M., Shampay, J., and Shippen-Lentz, D. (1989). Recognition and elongation of telomeres by telomerase. *Genome* 31: 553-560.
3. Greider, C.W. (1990). Telomeres, telomerase and senescence. *BioEssays* 12: 363-369.
4. Greider, C.W. (1991). Chromosome first aid. *Cell* 67: 645-647.
5. Greider, C.W. (1991). Telomeres. *Curr. Opin. Cell Biol.* 3: 444-451.
6. Greider, C.W. (1992). Telomeres and telomerase in small eukaryotes. In: *The eukaryotic genome: organization and regulation*. P.M.A. Broda, S.G. Oliver and P.F.G Sims, eds. Society for General Microbiology Symposium 50. Cambridge University Press. pp 31-42.
7. Greider, C.W. (1992). Telomere chromatin and gene expression. *Curr. Biol.* 2: 62-64.
8. Greider, C.W. (1993). Telomerase and telomere length regulation: lessons from small eukaryotes to mammals. *Cold Spring Harbor Symp. Quant. Biol.* 58: 719-723.
9. Greider, C.W., Autexier, C., Avilion, A.A., Collins, K., Harrington, L.A., Mantell, L.L., Prowse, K.R., Smith, S.K., Allsopp, R.C., Counter, C.M., Vaziri, H., Bacchetti, S., Harley, C.B. (1993). Telomeres and telomerase: biochemistry and regulation in senescence and immortalization. In: *The Chromosome*. J.S. Hesslop-Harrison and R.B. Flavell, eds. Bios Scientific Publishers Ltd. pp. 115-125.
10. Harley, C.B., Kim, N.W., Prowse, K.R., Weinrich, S.L., Hirsch, K.S., West, M.D., Bacchetti, S., Hirte, H.W., Counter, C.M., Greider, C.W., Piatyszek, M.A., Wright, W.E., and Shay, J.W. (1994). Telomerase, cell immortality and cancer. *Cold Spring Harbor Symp. Quant. Biol.* 59: 307-315.
11. Greider, C.W. (1994). Mammalian telomere dynamics: healing, fragmentation, shortening and stabilization. *Curr. Opin. Genet. and Dev.*, 4: 203-211.
12. Greider, C.W. (1995). Telomerase biochemistry and regulation. In: *Telomeres*. E.H. Blackburn and C.W. Greider, Eds. Cold Spring Harbor Laboratory Press. Cold Spring Harbor, New York. pp 35-68.
13. Greider, C. W. and Harley, C. B. (1996). Telomeres and telomerase in cell senescence and immortalization. In *Cellular Aging and Cell Death*, N. J. Holbrook, G. R. Martin, and R. A. Lockshin, eds. (New York, Wiley-Liss, Inc), pp. 123-138.
14. Greider, C.W. (1996). Telomere length regulation. *Ann. Rev. Biochem.* 65: 337-365.
15. Greider, C.W., and Blackburn, E.H. (1996). Telomeres, telomerase and cancer. *Scientific American* 274: 80-85.

16. Greider, C.W., K. Collins, C. Autexier. (1996). Telomerases. In: *DNA replication in Eukaryotic Cells*. M.L. DePamphilis, Ed. Cold Spring Harbor Laboratory Press. Cold Spring Harbor New York. pp 619-638.
17. Autexier, C., and Greider, C.W. (1996). Telomerase and Cancer: revisiting the telomere hypothesis. *Trends Biochem. Sci.* 21: 387-391.
18. Greider, C.W. (1998). Telomerase activity, cell proliferation and cancer. *Proc. Natl. Acad. Sci. U.S.A.* 95: 90-92.
19. Greider, C.W. (1998). Telomeres and senescence: the history, the experiment, the future. *Curr. Biol.* 8: R178-R181.
20. Greider, C.W. (1999). Telomerase Activation: one step on the road to cancer?. *Trends Genet.* 15: 109-111.
21. Greider, C.W. (1999). Telomeres do D-loop-T-loop. *Cell* 97: 419-422.
22. Kass-Eisler, A., and Greider, C.W. (2000). Recombination and telomere-length maintenance. *Trends Biochem. Sci.* 25: 200-204.
23. Hemann, M. T., Hackett, J., Ijima, A., and Greider, C. W. (2000). Telomere length, telomere binding proteins and DNA damage signaling, *Cold Spring Harbor Laboratory Symposium on Quantitative Biology LXX*, 275-279.
24. Greider, C.W. 2001 Cellular responses to telomere shortening: cellular senescence as a tumor suppressor mechanism. *Harvey Lect*: 96: 33-50.
25. Hackett, J. A., and Greider, C. W. (2002). Balancing Instability: Dual roles for telomerase and telomere dysfunction in tumorigenesis, *Oncogene*, 21: 619-626.
26. Feldser, D. M., Hackett, J., and Greider, C. W. (2003). Telomere dysfunction and the initiation of genome instability. *Nature Reviews Cancer* 3: 623-627.
27. Greider, C.W., and Blackburn, E.H. (2004). Tracking Telomerase. *Cell* 117: S83-S86
28. Chen, J.L., and Greider, C.W. (2004). Telomerase RNA structure and function: implications for dyskeratosis congenita *Trends Biochem Sci.* 29: 183-192.
29. Chen, J.L., and Greider, C.W. (2004). An emerging consensus for telomerase RNA structure. *Proc. Natl. Acad. Sci. U.S.A.* 101: 14683-14684.
30. Armanios, M., and Greider, C.W. (2005). Telomerase and Cancer Stem Cells. *Cold Spring Harbor Laboratory Symposium on Quantitative Biology*. Vol. LXX 205-208.
31. Chen, J.-L., and Greider, C. W. (2006). Telomerase Biochemistry and Biogenesis. In *Telomeres*, T. DeLange, E. H. Blackburn, and V. Lundblad, Cold Spring Harbor, NY, Cold Spring Harbor Press 49-73.
32. Blackburn, E. H., Greider, C. W., and Szostak, J. W. (2006). Telomeres and telomerase: the

path from maize, Tetrahymena and yeast to human cancer and aging. *Nat. Med.* 12, 1133-1138.

33. Greider, C.W. (2007) Telomerase RNA Levels Limit the Telomere Length Equilibrium. *Cold Spring Harbor Laboratory Symposium on Quantitative Biology*. Vol. LXXI 225-229.

**Inventions, Patents, Copyrights:**

Title: Telomerase Protein Components  
Inventors: Carol Greider, Kathleen Collins, Ryuji Kobayashi  
USPTO Application Number: 08/359,125.

Title: Mammalian Telomerase RNA Component  
Inventors: William Andrews, Junli Feng, Walter Funk, Bryant Villiponteau, Carol Greider, Ariel Avilion, Maria Blasco  
USPTO Application Number; 08/485,778.

Title: Transgenic Organisms with Altered Telomerase Activity  
Inventors: Carol Greider, Maria Blasco, Ron DePinho, Han woong-Lee  
USPTO Application Number: 08/623,166.

**Extramural Funding:**

Carol W. Greider is the principal investigator on all grants listed.

**CURRENT**

NIA 2RO1 AG09383-16  
Structure and Function of Telomerase  
20% Effort  
08/1/96 - 7/31/07  
Current Year Director Cost: \$201,883  
Total Direct Cost: \$330,079

NIGMS 5RO1 GM043080-17  
Telomerase and the Consequences of Telomere Dysfunction  
25% Effort  
12/1/99 - 4/30/07  
Current Year Direct Cost: \$250,000  
Total Direct Cost: \$408,542

NIH 1RO1 AG027406-01  
10% Effort  
Telomeres and Telomerase In Stem Cell Failure and Aging  
03/01/06 - 02/28/11  
Current Year Direct Cost: \$225,502  
Total Direct Cost: \$1,222,648

NIH 2PO1-CA016519-31  
Program on Molecular & Cellular Mechanisms of Tumorigenesis  
Jef Boeke/PI  
Subproject #5 (Greider - PI)  
Role of Short Telomeres in Genomic Instability and Tumor Initiation

20%  
 06/19/06 – 03/31/11  
 First Year Direct Cost: \$378,023  
 Total Direct Cost: \$1,925,946

**Pending**

NIH2RO1-AG09383-17  
 Structure and Function of Telomerase  
 15%  
 04/01/07 – 03/31/12  
 First Year Direct Cost: \$316,870  
 Total Direct Cost: \$1,679,618

**Educational Activities**

**Teaching:**

**Classroom Instruction**

Winter 1991- 1997	Lectures in Graduate Cell and Developmental Biology Course (MCB 656) State University of New York, Stony Brook
Fall 1997- 2003	Lectures in Graduate Molecular Biology Course Johns Hopkins University School of Medicine
Fall 2003-present	Lectures in Graduate Molecular Biology & Genomic Course Johns Hopkins University School of Medicine
Fall 1998-present	Instructor in Molecules and Cells Course Johns Hopkins University School of Medicine

**Mentoring (pre- and postdoctoral):**

**Past pre-doc**

Lea Harrington	1988-1993
Ariel Avilion	1990-1995
Helena Yang	1995-1997
Douglas Mason	1997-2002
Michael Hemann	1998-2001
Arne Ijpmma	1998-2004
Jennifer Hackett	1999-2003
Ling-Yang Hao	2000-2005
Christopher Frank	2001-2006
David Feldser	2001-2006

**Past postdoc**

Karen Prowse	1990-1994
Lin Mantell	1991-1994
Chantal Autexier	1991-1997
Kathleen Collins	1992-1995

Maria Blasco	1993-1997
Karen Buchkovich	1994-1996
Bong-Kyong Oh	1995-1996
Siyuan Le	1995-2000
Stephen Buck	1996-1999
Michael Rudd	1997-1999
Qijun Chen	1999-2000
Alyson Kass-Eisler	1995-1999
Kay Opperman.	1997-2000
Jiunn-Liang Chen	1998-2004
Ling Qi	2001-2005
Mary Armanios	2003-2005

**Present-predoc**

Vinny Ranganathan	2003-present
Molly Hyde	2005-present
Joseph Kabogo	2005-present

**Present postdoc**

Hui-I Tom	2004-present
Tammy Morrish	2004-present
Yunmei Ma	2004-present

**Thesis Committees Completed:**

Fred Bunz – 1992, Thesis Committee Member.  
 York Maharens – 1993, Thesis committee Member.  
 Lea Harrington – 1993, Thesis Supervisor.  
 Karen Fein – 1994, Thesis Committee Member.  
 Ariel Avilion – 1995, Thesis Supervisor.  
 Neena Serreen – 1995, Thesis Supervisor.  
 Meenakshi Selvakumar – 1998, Thesis Committee Member.  
 Alessandro Bianchi –, 1998, Thesis Outside Reviewer.  
 Oxana Pickeral – 2000, Thesis Committee Member.  
 Greg Cost – 2001, Thesis Committee Member.  
 Eric Bolton – 2002, Thesis Committee Member.  
 Siew Loon Ooi – 2002, Thesis Committee Member.  
 Joe Lewcock – 2003, Thesis Committee Member.  
 Nurjana Bachman – 2004, Thesis Committee Member.  
 Dan Southworth – 2004, Thesis Committee Member.  
 Matthew Frieman – 2004, Thesis Committee Member.  
 Hao, Jiang – 2005, Thesis Committee Member  
 John Callegari – 2006, Thesis Committee Member  
 Yong Jie Xu – 2006, Thesis Committee Member  
 John Arigo – 2006, Thesis Committee Member  
 Jiang Hao – 2006, Thesis Committee Member  
 Christina Carroll – 2006, Thesis Committee Member  
 Ivanna Celic –2006, Advisor: Jeff Boeke  
 Rebekah Zinn – 2007, Advisor: James Herman

**Thesis Committees Current:**

Adel Hyland – Advisor: Jef Boeke  
 Nailing Zhang – Advisor: D.J. Pan

**Education Extramural Funding:**

**Current:**

NCI 5T32 CA009139-30  
 5% Effort  
 Title: Training Program on Molecular Genetics of Tumor Viruses and Cells  
 05/01/01- 04/30/07  
 No Cost extension

**Pending:**

NIH 2T32 CA009139-31A1  
 5% Effort  
 Title: Training Program on Molecular Genetics of Tumor Viruses and Cells  
 07/01/07 – 06/30/12  
 Current Year Direct Cost: \$508,461  
 Total Direct Cost: 2,599,196

**Editorial Activities:**

Editorial Board, <i>International Journal of Cancer</i>	2004-present
Editorial Board, <i>Biomedical Central (BMC) Molecular Biology</i>	2004-present
Editorial Board, <i>Molecular Cancer Research</i>	2003-present
Editorial Board, <i>Cancer Cell</i>	2001-present
Editorial Board, <i>BBA Reviews on Cancer</i>	1996-2000
Editorial Board, <i>Trends in Biochemical Sciences</i>	1996-1999

**Organizational Activities:**

**Johns Hopkins University Service:**

Co-Chair Embryonic Stem Cell Research Cmte	2006-present
Co-Chair Search Committee, Department of Dermatology	2005-2006
Search Committee, Department of Biophysics	2004-2003
Committee on Faculty Recruitment & Diversity	2004-present
Medical Scientist Training Program Steering Committee	2004-present
University Committee on Status of Women	2002-2006
Women's Leadership Council	2001-present
Admissions Director for Biochemistry, Cell and Molecular Biology Graduate Program	2000-2002

**Advisory Committees, Review Groups:**

National Bioethics Advisory Commission	1996-2001
NIH RFA Study Section	November 1998
NIH Ad hoc Reviewer, Molecular Cytology Study Section	October 1994
NIH Ad hoc RFA Review Committee	February 1993

NIH Ad hoc Site Visit Committee

June 1992

**Commission Papers:**

Cloning Human Beings: Report and Recommendations of the National Bioethics Advisory Commission. Rockville MD: May 1997. (Commission Member)

Research Involving Persons with Mental Disorders that may affect Decision making Capacity Report and Recommendations of the National Bioethics Advisory Commission. Rockville MD: December 1998. (Commission Member)

Research involving human biological materials: Ethical issues and policy guidance. Report and Recommendations of the National Bioethics Advisory Commission. Rockville MD: August 1999 (Commission Member)

Ethical Issues in Human Stem Cell Research: Report and Recommendations of the National Bioethics Advisory Commission. Rockville MD: September 1999 (Commission Member)

Ethical and Policy Issues in International Research: Clinical Trails in Developing Countries Report and Recommendations of the National Bioethics Advisory Commission. Bethesda MD: April 2001 (Commission Member)

Ethical and Policy Issues in Research involving Human Participants. Report and Recommendations of the National Bioethics Advisory Commission. Bethesda MD: August 2001 (Commission Member)

**Professional Societies:**

<u>Date</u>	<u>Society</u>
1989-present	American Association for the Advancement of Science
1994-present	American Society for Microbiology
1994-present	American Association for Cancer Research
1995-present	The RNA Society
1996-present	American Society for Cell Biology
2004-present	American Society for Biochemistry & Molecular Biology

**Conference Organizer:**

<u>Date</u>	<u>Place</u>
5/4/03	Cold Spring Harbor Laboratory, NY Telomeres and Telomerase
3/24/01	Cold Spring Harbor Laboratory, NY Telomeres and Telomerase
3/25/99	Cold Spring Harbor Laboratory, NY Telomeres and Telomerase
4/10/99	Philadelphia, PA AACR Annual Meeting-program committee
6/21/98	Gordon Conference - Rhode Island

	Nucleic Acids
11/3/96	Banbury Center - CSHL
	Telomeres and Telomerase
7/2/95	Copper Mountain, CO
	Ciliate Molecular Biology-FASEB
10/23/94	Banbury Center - CSHL
	Telomeres

**Consultantships:**

Geron Corporation, Scientific Advisory Board Member, July 1992-June 1996

Amgen, Inc., Consultant, 1998-2002

**Recognition****Awards, Honors:**

Albert Lasker Award for Basic Medical Research	2006
The Wiley Prize in Biomedical Sciences	2006
Lila Gruber Cancer Research Award	2006
Fellow, American Academy of Microbiology	2004
Fellow, American Association for the Advancement of Science	2003
Member, National Academy of Sciences	2003
Fellow, American Academy of Arts and Sciences	2003
Richard Lounsbery Award (NAS)	2003
Harvey Society Lecture	2000
Rosenstiel Award in Basic Medical Research	1999
Passano Foundation Award	1999
Gairdner Foundation Award	1998
Ellison Medical Foundation Senior Scholar	1998
Schering-Plough Scientific Achievement Award, American Society for Biochemistry and Molecular Biology	1997
Cornelius Rhoads Award, American Association for Cancer Research	1996
Glenn Foundation Award, American Society for Cell Biology	1995
Gertrude Elion Cancer Research Award, American Association for Cancer Research	1994
Allied Signal Outstanding Project Award	1992
Pew Scholar in the Biomedical Sciences	1990-1994
Phi Beta Kappa Society	1983
Regents Scholarship, University of California	1981

**Invited Talks, Panels:**

1991 - 2006 -- 72 Invited Talks at National and International Conferences

1991 - 2006 -- 112 Invited Seminars at National and International Institutions