

1. Goldstein, R., Sedivy, J.M. and Ljungquist, E. (1982). Propagation of satellite phage P4 as a plasmid. *Proc. Natl. Acad. Sci. USA* **79**: 515-519.
2. Geisselsoder, J., Sedivy, J.M., Walsh, R.B. and Goldstein, R. (1982). Capsid structure of satellite phage P4 and its P2 helper. *J. Ultrastruct. Res.* **79**: 165-173.
3. Sedivy, J.M., Daldal, F. and Fraenkel, D.G. (1984). Fructose biphosphatase of *Escherichia coli*: Cloning of the structural gene (*fbp*) and preparation of a chromosomal deletion. *J. Bacteriol.* **158**: 1048-1053.
4. Sedivy, J.M. and Fraenkel, D.G. (1985). Fructose biphosphatase of *Saccharomyces cerevisiae*: cloning, disruption and regulation of the *FBP1* gene. *J. Mol. Biol.* **186**: 307-319.
5. Sedivy, J.M., Babul, J. and Fraenkel, D.G. (1986). AMP-insensitive fructose biphosphatase in *Escherichia coli* and its consequences. *Proc. Natl. Acad. Sci. USA* **83**: 1656-1659.
6. Capone, J.P., Sedivy, J.M., Sharp, P.A. and RajBhandary, U.L. (1986). Introduction of UAG, UAA and UGA nonsense mutations at a specific site in the *Escherichia coli* chloramphenicol acetyltransferase gene: use in measurement of amber, ochre and opal suppression in mammalian cells. *Mol. Cell. Biol.* **6**: 3059-3067.
7. Sedivy, J.M., Capone, J.P., RajBhandary, U.L. and Sharp, P.A. (1987). An inducible mammalian amber suppressor: propagation of a poliovirus mutant. *Cell* **50**: 379-389.
8. Sedivy, J.M. (1988). New genetic methods for mammalian cells. *Bio/Technology*, **6**: 1192-1196.
9. Sedivy, J.M. and Sharp, P.A. (1989). Positive genetic selection for gene disruption in mammalian cells by homologous recombination. *Proc. Natl. Acad. Sci. USA* **86**: 227-231.
10. Schnipper, L.E., Chan, V., Sedivy, J.M., Jat, P.S. and Sharp, P.A. (1989). Gene activation by induced DNA rearrangements. *Cancer Res.* **49**: 6640-6644.
11. Leonardo, E.D. and Sedivy, J.M. (1990). A new vector for cloning large eukaryotic DNA segments in *E. coli*. *Bio/Technology* **8**: 841-844.
12. Sedivy, J.M. (1991). Pilot scale protein production using inducible gene amplification. In: *Animal Cell Culture and Production of Biologicals*, R. Sasaki and K. Ikura (eds.), Kluwer Academic Publishers, Dordrecht, Netherlands, pp. 251-258.
13. Sedivy, J.M. and Joyner, A. (1992). *Gene Targeting*. W.H. Freeman Press, NY.
14. Prouty, S.M., Hanson, K.D., Boyle, A.L., Brown, J.R., Shichiri, M., Follansbee, M.R., Kang, W. and Sedivy, J.M. (1993). A cell culture model system for genetic analyses of the cell cycle by targeted homologous recombination. *Oncogene* **8**: 899-907.

15. Shichiri, M., Hanson, K.D. and Sedivy, J.M. (1993). The effects of *c-myc* expression on proliferation, quiescence, and the G<sub>0</sub> to G<sub>1</sub> transition in nontransformed cells. *Cell Growth Diff.* **4**: 93-104.
16. Li, S. and Sedivy, J.M. (1993). Raf-1 protein kinase activates the NF- $\kappa$ B transcription factor by dissociating the cytoplasmic NF- $\kappa$ B/I $\kappa$ B complex. *Proc. Natl. Acad. Sci. USA* **90**: 9247-9251.
17. Karantza, V., Maroo, A., Fay, D. and Sedivy, J.M. (1993). Overproduction of Rb protein after the G<sub>1</sub>/S boundary causes G<sub>2</sub> arrest. *Mol. Cell. Biol.* **13**: 6640-6652.
18. Hanson, K.D., Shichiri, M., Follansbee, M.R. and Sedivy, J.M. (1994). Effects of *c-myc* expression on cell cycle progression. *Mol. Cell. Biol.* **14**: 5748-5755.
19. Hanson, K.D., and Sedivy, J.M. (1995). Analysis of biological selections for high efficiency gene targeting. *Mol. Cell. Biol.* **15**: 45-51.
20. Li, S., Janosch, P., Tanji, M., Rosenfeld, G.C., Waymire, J.C., Mischak, H., Kolch, W. and Sedivy, J.M. (1995). Regulation of Raf-1 kinase activity by the 14-3-3 family of proteins. *EMBO J.*, **14**: 685-696.
21. Brown, J.P. and Sedivy, J.M. (1995). What could be simpler? Using human cells to study human cancer. *J. Am. Anti-Vivisect. Soc.* **103**: 15-18.
22. Yang, T.-A., Heiser, W.C. and Sedivy, J.M. (1995). Efficient *in situ* electroporation of mammalian cells grown on microporous membranes. *Nucleic Acids Res.* **23**: 2803-2810.
23. Janosch, P., Schellerer, M., Seitz, T., Reim, P., Eulitz, M., Brielmeier, M., Kolch, W., Sedivy, J.M. and Mischak, H. (1996). Characterization of I $\kappa$ B kinases: I $\kappa$ B- $\alpha$  is not phosphorylated by Raf-1 or protein kinase C isozymes, but is a casein kinase II substrate. *J. Biol. Chem.* **271**: 13868-13874.
24. Weissinger, E.M., Eissner, G., Grammer, C., Fackler, S., Haefner, B., Yoon, L.S., Lu, K.L., Bazarov, A., Sedivy, J.M., Mischak, H. and Kolch, W. (1997). Inhibition of the Raf-1 kinase by cAMP agonists causes apoptosis of v-abl transformed cells. *Mol. Cell. Biol.* **17**: 3229-3241.
25. Brown, J.P., Wei, W. and Sedivy, J.M. (1997). Bypass of senescence after disruption of p21<sup>CIP1/WAF1</sup> gene in normal diploid human fibroblasts. *Science* **277**: 831-834.
26. Mateyak, M.K., Obaya, A.J., Adachi, S. and Sedivy, J.M. (1997). Phenotypes of c-Myc-deficient fibroblasts isolated by targeted homologous recombination. *Cell. Growth Diff.* **8**: 1039-1048.
27. Shichiri, M., Adachi, S., Sedivy, J.M. and Marumo, F. (1997). Biphasic regulation of the preproendothelin-1 gene by *c-myc*. *Endocrinology* **138**: 4584-4590.
28. Shichiri, M., Sedivy, J.M., Marumo, F. and Hirata, Y. (1997). Endothelin-1 is a potent survival factor for c-Myc-dependent apoptosis. *Mol. Endocrinol.*, **12**: 172-180.

29. Prouty, S.M., Maroo, A., Maucher, C., Mischak, H., Kolch, W. and Sedivy, J.M. (1998). Studies of perinuclear and nuclear translocation of the Raf-1 protein in rodent fibroblasts. *Biochim. Biophys. Acta*, **1404**: 6-16.
30. Lu, K.K., Bazarov, A.V., Yoon, L.S. and Sedivy, J.M. (1998). Isolation of temperature-sensitive mutations in the *c-raf-1* catalytic domain and expression of conditionally active and dominant-defective forms of Raf-1 in cultured mammalian cells. *Cell Growth Diff.*, **9**: 367-380.
31. Sedivy, J.M. (1998). Can ends justify the means?: Telomeres and the mechanisms of replicative senescence and immortalization in mammalian cells. *Proc. Natl. Acad. Sci. USA*, **95**: 9078-9081.
32. Bunz, F., Dutriaux, A., Lengauer, C., Waldman, T., Zhou, S., Brown, J.P., Sedivy, J.M., Kinzler, K.W. and Vogelstein, B. (1998). The induction of p21 by p53 is required for sustained G2 arrest following DNA damage. *Science* **282**: 1497-1501.
33. Counter, C.M., Hahn, W.C., Wei, W., Dickinson-Caddle, S., Beijersbergen, R.L., Lansdorp, P.M., Sedivy, J.M. and Weinberg, R.A. (1998). Dissociation between in vitro telomerase activity, telomere maintenance and cellular immortalization. *Proc. Natl. Acad. Sci. USA* **95**: 14723-14728.
34. Bush, A., Mateyak, M.K., Dugan, K., Obaya, A., Adachi, S., Sedivy, J.M. and Cole, M.D. (1998). *c-myc* null cells misregulate *cad* and *gadd45* but not other proposed c-Myc targets. *Genes Dev.* **12**: 3797-3802.
35. Xiao, Q., Claassen, G., Shi, J., Adachi, S., Sedivy, J.M. and Hann, S.R. (1998). Transactivation-defective c-MycS retains the ability to regulate growth and apoptosis. *Genes Dev.* **12**: 3803-3808.
36. Sedivy, J.M., Vogelstein, B., Liber, H.L., Hendrickson, E. and Rosmarin, A. (1999). Gene targeting in human cells without isogenic DNA. *Science* **283**: 9-9a.
37. Sedivy, J.M. and Dutriaux, A. (1999). Gene targeting and somatic cell genetics: a rebirth or a coming of age? *Trends Genet.* **14**: 88-90.
38. Wei, S., Wei, W. and Sedivy, J.M. (1999). Expression of catalytically active telomerase does not prevent premature senescence caused by overexpression of oncogenic Ha-Ras in normal human fibroblasts. *Cancer Res.* **59**: 1539-1543.
39. Obaya, A.J., Mateyak, M.K. and Sedivy, J.M. (1999). Mysterious liaisons: the relationship between c-Myc and the cell cycle. *Oncogene* **18**: 2934-2941.
40. Mateyak, M.K., Obaya, A.J. and Sedivy, J.M. (1999). c-Myc regulates cyclin D/Cdk4/6 activity but affects cell cycle progression at multiple independent steps. *Mol. Cell. Biol.* **19**: 4672-4683.
41. Yeung, K.C., Seitz, T., Li, S., Janosch, P., McFerran, B., Kaiser, C., Fee, F., Katsanakis, K.D., Rose, D.W., Mischak, H., Sedivy, J.M. and Kolch, W. (1999). Suppression of Raf-1 kinase activity and MAP kinase signalling by RKIP. *Nature* **401**: 173-177.

42. Wei, W. and Sedivy, J.M. (1999). Differentiation between senescence (M1) and crisis (M2) in human fibroblast cultures. *Exp. Cell Res.* **253**: 519-522.
43. Chuang, Y.Y.E., Chen, Q., Brown, J.P., Sedivy, J.M. and Liber, H.L. (1999). Radiation-induced mutations at the autosomal thymidine kinase locus are not elevated in p53-null cells. *Cancer Res.* **59**: 3073-3076. Published correction appears in *Cancer Res.* **59**: 5400.
44. Hermeking, H., Rago, C., Schuhmacher, M., Li, Q., Barrett, J.F., Obaya, A.J., O'Connell, B.C., Mateyak, M.K., Tam, W., Kohlhuber, F., Dang, C.V., Sedivy, J.M., Eick, D., Vogelstein, B. and Kinzler, K.W. (2000). Identification of CDK4 as a target of c-MYC. *Proc. Natl. Acad. Sci. U. S. A.* **97**: 2229-2234.
45. Yeung, K.C., Janosch, P., McFerran, B., Rose, D.W., Mischak, H., Sedivy, J.M. and Kolch, W. (2000). The mechanism of suppression of the Raf/MEK/ERK pathway by the RKIP inhibitor protein. *Mol. Cell. Biol.* **20**: 3079-3085.
46. Oster, S.K., Marhin, W.W., Asker, C., Facchini, L.M., Bion, P.A., Funa, K., Post, M., Sedivy, J.M. and Penn, L.Z. (2000). Myc is an essential negative regulator of platelet-derived growth factor beta receptor expression. *Mol. Cell. Biol.* **20**: 6768-6778.
47. Landay, M., Oster, S.K., Khosravi, F., Grove, L.E., Yin, X., Sedivy, J.M., Penn, L.Z. and Prochownik, E.V. (2000). Promotion of growth and apoptosis in c-myc nullizygous fibroblasts by other members of the myc oncoprotein family. *Cell Death Differ.* **7**: 697-705.
48. Bazarov, A.V., Adachi, S., Li, S., Mateyak, M.K., Wei, S. and Sedivy, J.M. (2001). A modest reduction in c-Myc expression has minimal effects on cell growth and apoptosis but dramatically reduces susceptibility to Ras and Raf transformation. *Cancer Res.* **61**: 1178-1186.
49. Soucie, E.L., Annis, M.G., Sedivy, J.M., Filmus, J., Leber, B., Andrews, D.W. and Penn, L.Z. (2001). Myc potentiates apoptosis by stimulating Bax activity at the mitochondria. *Mol. Cell. Biol.* **21**: 4725-4736.
50. Bowman, T., Broome, M.A., Sinibaldi, D., Wharton, W., Pledger, W.J., Sedivy, J.M., Irby, R., Yeatman, T., Courtneidge, S.A. and Jove, R. (2001). Stat3-mediated Myc expression is required for Src transformation and PDGF-induced mitogenesis. *Proc. Natl. Acad. Sci. USA* **98**: 7319-7324.
51. Adachi, S., Obaya, A.J., Han, Z., Ramos-Desimone, N., Wyche, J.H. and Sedivy, J.M. (2001). c-Myc is necessary for DNA damage-induced apoptosis in the G2 phase of the cell cycle. *Mol. Cell. Biol.* **21**: 4929-4937.
52. Wei, W., Hemmer, R.M. and Sedivy, J.M. (2001). The role of p14<sup>ARF</sup> in replicative and induced senescence of human fibroblasts. *Mol. Cell. Biol.* **21**: 6748-6757.
53. Yeung, K.C., Rose, D.W., Dhillon, A.S., Yaros, D., Gustafsson, M., Chatterjee, D., McFerran, B., Wyche, J., Kolch, W. and Sedivy, J.M. (2001). Raf kinase inhibitor protein interacts with NF- $\kappa$ B-inducing kinase and TAK1 and inhibits NF- $\kappa$ B activation. *Mol. Cell. Biol.* **21**: 7207-7217.

54. Sedivy, J.M. (2001). The cellular immortalization process: relevant issues for the generation of cell substrates for production of vaccines and other biologicals. In: F. Brown, A.M. Lewis, K. Peden and P. Krause (eds.), *Evolving Scientific and Regulatory Perspectives on Cell Substrates for Vaccine Development. Dev. Biol. (Basel)* **106**: 479-488.
55. Obaya, A.J. and Sedivy, J.M. (2002). Regulation of Cyclin-Cdk Activity in Mammalian Cells. *Cell. Mol. Life Sci.* **59**: 126-142.
56. Raderschall, E., Bazarov, A., Cao, J., Lurz, R., Smith, A., Mann, W., Ropers, H.-H., Sedivy, J.M., Golub, E.I., Fritz, E. and Haaf, T. (2002). Formation of nuclear Rad51 structures is functionally linked to p21 expression and protection from DNA-damage-induced apoptosis. *J. Cell Sci.* **115**: 153-164.
57. Sedivy, J.M. (2002). Gene targeting comes to top-down drug screens. *Trends Biotechnol.* **20**: 92-93.
58. Han, Z., Wei, W., Dunaway, S., Darnowski, J.W., Calabresi, P., Sedivy, J.M., Hendrickson, E.A., Balan, K., Pantazis, P. and Wyche, J.H. (2002). Role of p21 in apoptosis and senescence of human colon cancer cells treated with camptothecin. *J. Biol. Chem.* **277**: 17154-17160.
59. Bunz, F., Fauth, C., Speicher, M.R., Dutriaux, A., Sedivy, J.M., Kinzler, K.W., Vogelstein, B. and Lengauer, C. (2002). Targeted inactivation of p53 in human cells does not result in aneuploidy. *Cancer Res.* **62**: 1129-1133.
60. Obaya, A.J., Kotenko, I., Cole, M.D. and Sedivy, J.M. (2002). The protooncogene c-Myc acts through the cyclin-dependent kinase inhibitor p27<sup>Kip1</sup> to facilitate the activation of cyclin-dependent kinase 4/6 and early G1 phase progression. *J. Biol. Chem.* **277**: 31263-31269.
61. Nikiforov, M.A., Chandriani, S., O'Connell, B., Petrenko, O., Kotenko, I., Beavis, A., Sedivy, J.M. and Cole, M.D. (2002). A functional screen for Myc-responsive genes reveals serinehydroxymethyltransferase, a major source of the one-carbon unit for cell metabolism. *Mol. Cell. Biol.* **22**: 5793-5800.
62. Wang, Z., Bhattacharya, N., Mixter, P.F., Wei, W., Sedivy, J.M. and Magnuson, N.S. (2002). Phosphorylation of the cell cycle inhibitor p21<sup>Cip1/WAF1</sup> by Pim-1 kinase. *Biochim. Biophys. Acta* **1593**: 45-55.
63. You, Z., Madrid, L.V., Saims, D., Sedivy, J.M. and Wang, C.Y. (2002). c-Myc sensitizes cells to tumor necrosis factor-mediated apoptosis by inhibiting nuclear factor kB transactivation. *J. Biol. Chem.* **277**: 36671-36677.
64. Schorl, C. and Sedivy, J.M. (2003). Loss of protooncogene c-Myc function impedes G1 phase progression both before and after the restriction point. *Mol. Biol. Cell.* **14**: 823-835.
65. O'Connell, B.C., Cheung, A.F., Simkevich, C.P., Tam, W., Ren, X., Mateyak, M.K. and Sedivy, J.M. (2003). A large scale genetic analysis of c-Myc-regulated gene expression patterns. *J. Biol. Chem.* **278**: 12563-12573.

66. Wei, W., Jobling, W.A., Chen, W., Hahn, W.C. and Sedivy, J.M. (2003). Abolition of cyclin-dependent kinase inhibitors p16<sup>Ink4a</sup> and p21<sup>Cip1/Waf1</sup> functions permits Ras-induced anchorage-independent growth in telomerase-immortalized human fibroblasts. *Mol. Cell Biol.* **23**: 2859-2870.
67. Sedivy, J.M., Shippen, D.E. and Shakirov, E.V. (2003). Surprise ending (invited News & Views article). *Nat. Genet.* **33**: 114-116.
68. Hemmer, R.M., Wei, W., Dutriaux, A. and Sedivy, J.M. (2003). Somatic cell knockouts of tumor suppressor genes. In: *Methods in Molecular Biology*, vol. 223, Tumor Suppressor Genes. Wafik S. El-Deiry, Editor. Humana Press, Totowa, New Jersey, USA. pp. 187-206.
69. Junqueira, D., Cilenti, L., Musumeci, L., Sedivy, J.M. and Zervos, A.S. (2003). Random mutagenesis of the PDZ<sub>Omi</sub> domain and selection of mutants that specifically bind the Myc protooncogene and induce apoptosis. *Oncogene* **22**: 2772-2781.
70. Collins, C.J. and Sedivy, J.M. (2003). Involvement of the INK4a/ARF gene locus in senescence. *Aging Cell* **2**: 145-150..
71. Young, J.I., Sedivy, J.M. and Smith, J.R. (2003). Telomerase expression in normal human fibroblasts stabilizes DNA 5-methylcytosine transferase I (DNMT1). *J. Biol. Chem.* **278**: 19904-19908.
72. Sedivy, J.M. (2003). Reproductive cloning conserves cellular senescence (invited News & Views article). *Nat. Cell Biol.* **5**: 495-496.
73. Lindvall, C., Hou, M., Komurasaki, T., Zheng, C., Henriksson, M., Sedivy, J.M., Bjorkholm, M., Teh, B.T., Nordenskjold, M. and Xu, D. (2003). Molecular characterization of human telomerase reverse transcriptase-immortalized human fibroblasts by expression profiling: activation of the Epiregulin gene. *Cancer Res.* **63**: 1743-1747.
74. Ma, W., Hommel, C., Brenneisen, P., Peters, T., Smit, N., Sedivy, J.M., Scharffetter-Kochanek, K. and Wlaschek, M. (2003). Long-term growth arrest of PUVA-treated fibroblasts in G2/M in the absence of p16<sup>INK4a</sup>, p21<sup>CIP1</sup> or p53. *Exp. Dermatol.* **12**: 629-637.
75. Wei, W., Herbig, U., Wei, S., Dutriaux, A. and Sedivy, J.M. (2003). Loss of Rb but not p16 function allows bypass of replicative senescence in human fibroblasts. *EMBO R.* **4**: 1061-1066.
76. Herbig, U., Wei, W., Dutriaux, A., Jobling, W.A. and Sedivy, J.M. (2003). Real time imaging of transcriptional activation in live cells reveals rapid upregulation of the cyclin-dependent kinase inhibitor gene *CDKN1A* in replicative cellular senescence. *Aging Cell* **2**: 295-304.
77. Hindley, A.D., Park, S., Wang, L., Shah, K., Wang, Y., Hu, X., Shokat, K.M., Kolch, W., Sedivy, J.M. and Yeung, K.C. (2004). Engineering the serine/threonine protein kinase Raf-1 to utilize an orthogonal analogue of ATP substituted at the N<sup>6</sup> position. *FEBS Lett.* **556**: 26-34.
78. Chatterjee, D., Bai, Y., Wang, Z., Beach, S., Mott, S., Roy, R., Braastad, C., Sun, Y., Mukhopadhyay, A., Aggarwal, B.B., Darnowski, J., Pantazis, P., Wyche, J., Fu, Z.,

- Kitagawa, Y., Keller, E.T., Sedivy, J.M. and Yeung, K.C. (2004). RKIP sensitizes prostate and breast cancer cells to drug-induced apoptosis. *J. Biol. Chem.* **279**: 17515-17523.
79. Martin-Ruiz, C., Saretzki, G., Petrie, J., Ladhoff, J., Jeyapalan, J., Wei, W., Sedivy, J.M. and von Zglinicki, T. (2004). Stochastic variation in telomere shortening rate causes heterogeneity of human fibroblast replicative lifespan. *J. Biol. Chem.* **279**: 17826-17833.
80. Herbig, U., Jobling, W.A., Chen, B.P.C., Chen, D.J. and Sedivy, J.M. (2004). Telomere shortening triggers replicative senescence of human cells through a signaling pathway involving ATM, p53 and p21<sup>CIP1</sup> but not p16<sup>INK4a</sup>. *Mol. Cell* **14**: 501-513.
81. Csoka, A.B., English, S.B., Simkevich, C.P., Ginzinger, D.G., Butte, A.J., Schatten, G.P., Rothman, F.G. and Sedivy, J.M. (2004). Genome-scale expression profiling of Hutchinson-Gilford Progeria Syndrome reveals widespread transcriptional misregulation leading to mesodermal/mesenchymal defects and accelerated atherosclerosis. *Aging Cell* **3**: 235-243.
82. Charrier-Savourin, F.B., Chateau, M.T., Gire, V., Sedivy, J.M., Piette, J. and Dulic, V. (2004). p21-mediated nuclear retention of cyclin B1-Cdk1 in response to genotoxic stress. *Mol. Biol. Cell* **15**: 3965-3976.
83. Smith, K.P., Byron, M., O'Connell, B., Tam, R., Schorl, C., Guney, I., Hall, L.L., Agrawal, P., Sedivy, J.M. and Lawrence, J.B. (2004). c-Myc localization within the nucleus: evidence for association with the PML nuclear body. *J. Cell. Biochem.* **93**: 1282-1296.
84. Rothermund, K., Rogulski, K., Fernandes, E., Whiting, A., Sedivy, J.M., Pu, L. and Prochownik, E.V. (2005). c-Myc-independent restoration of multiple phenotypes by two c-Myc target genes with overlapping functions. *Cancer Res.* **65**: 2097-2107.
85. Munoz-Alonso, M.J., Acosta, J.C., Richard, C., Delgado, M.D., Sedivy, J.M. and Leon, J. (2005). p21 Cip1 and p27 Kip1 induce distinct cell cycle effects and differentiation programs in myeloid leukemia cells. *J. Biol. Chem.* **280**: 18120-18129.
86. Remondini, D., O'Connell, B., Intrator, N., Sedivy, J.M., Neretti, N., Castellani, G.C. and Cooper, L.N. (2005). Targeting c-Myc activated genes via a correlation method: detection of global changes in large gene expression network dynamics. *Proc. Natl. Acad. Sci. USA* **102**: 6902-6906.
87. Tamura, K., Hua, B., Adachi, S., Guney, I., Kawauchi, J., Morioka, M., Tamamori-Adachi, M., Tanaka, Y., Nakabeppu, Y., Sunamori, M., Sedivy, J.M. and Katajima, S. (2005). Stress response gene ATF3 is a target of c-myc in serum-induced cell proliferation. *EMBO J.* **24**:2590-2601.
88. Kujoth, G.C., Hiona, A., Pugh, T.D., Someya, S., Panzer, K., Wohlgemuth, S., Hofer, T., Hacker, T.A., Seo, A.Y., Sullivan, R., Jobling, W.A., Morrow, J., Van Remmen, H., Sedivy, J.M., Yamasoba, T., Tanokura, M., Saupe, K.W., Weindruch, R., Leeuwenburgh C. and Prolla, T.A. (2005). Mitochondrial DNA mutations, oxidative stress and apoptosis in mammalian aging. *Science* **309**: 481-484.
89. Sheffler, W., Upfal, E., Sedivy, J.M. and Noble, W.S. (2005). A learned comparative expression measure for Affymetrix GeneChip DNA microarrays. *Proceedings of the 2005 IEEE Computational Systems Bioinformatics Conference, Stanford, CA*: pp. 144-154 (PMID: 16447972).

90. Herbig, U. and Sedivy, J.M. (2006). Regulation of growth arrest in senescence: telomere damage is not the end of the story. *Mech. Ageing Dev.* **127**: 16-24 (PMID: 16229875).
91. Herbig, U., Ferreira, M., Condel, L., Carey, D. and Sedivy, J.M. (2006). Cellular senescence in aging primates. *Science* **311**: 1257 (PMID: 16456035).
92. Guney, I., Wu, S. and Sedivy, J.M. (2006). Reduced c-Myc signaling triggers telomere-independent senescence by regulating the polycomb repressor Bmi-1 and the CDK inhibitor p16<sup>INK4a</sup>. *Proc. Natl. Acad. Sci. USA* **103**: 3645-3650 (PMID: 16537449).
93. Lee, H.C., Tian, B., Sedivy, J.M., Wands, J.R. and Kim, M. (2006). Loss of Raf Kinase Inhibitor Protein promotes cell proliferation and migration of human hepatoma cells. *Gastroenterology* **131**: 1208-1217 (PMID: 17030190).
94. Guney, I. and Sedivy, J.M. (2006). Cellular senescence, epigenetic switches and c-Myc. *Cell Cycle* **5**: 2319-2323 (PMID: 17102614).
95. Manley, K., O'Hara, B. A., Gee, G.V., Simkevich, C.P., Sedivy, J.M. and Atwood, W.J. (2006). NFAT4 is required for JCV infection of glial cells. *J. Virol.* **80**: 12079-12085 (PMID: 17035332).
96. Jeyapalan, J.C., Ferreira, M., Sedivy, J.M. and Herbig, U. (2007). Accumulation of senescent cells in mitotic tissues of aging primates. *Mech. Ageing Dev.* **128**: 36-44 (PMID: 17116315).
97. Schorl, C. and Sedivy, J.M. (2007). Analysis of cell cycle phases and progression in cultured mammalian cells. *Methods* **41**: 143-150 (PMID: 17189856).
98. Neretti, N., Remondini, D., Tatar, M., Sedivy, J.M., Mazzatti, D., Powell, J., Franceschi, C. and Castellani, G.C. (2007). Correlation analysis reveals the emergence of coherence in the gene expression dynamics following system perturbation. *BMC Bioinformatics* **8** (Suppl. 1): S16 (PMID: 17430560).
99. Theroux, S., Pereira, M., Casten, K.S., Burwell, R.D., Yeung, K.C., Sedivy, J.M. and Klysik, J. (2007). Raf kinase inhibitory protein knockout mice: expression in the brain and olfaction deficit. *Brain Res. Bull.* **71**: 559-567 (PMID: 17292798).
100. Sedivy, J.M. (2007). Telomeres limit cancer growth by inducing senescence: Long-sought in vivo evidence obtained (Preview article). *Cancer Cell* **11**: 389-391 (PMID: 17482128).
101. Manley, K., Gee, G.V., Simkevich, C.P., Sedivy, J.M., and Atwood, W.J. (2007). Microarray analysis of glial cells resistant to JCV infection suggests a correlation between viral infection and inflammatory cytokine gene expression. *Virology* **366**: 394-404 (PMID: 17555786).
102. Moffit, J.S., Boekelheide, K., Sedivy, J.M. and Klysik, J. (2007). Mice lacking Raf Kinase Inhibitory Protein (RKIP) have altered sperm capacitation and reduced reproduction rates. *J. Androl.* **28**: 883-890 (PMID: 17554109).



103. Remondini, D., Neretti, N., Sedivy, J.M., Franceschi, C., Milanese, L., Tieri, P. and Castellani, G.C. (2007). Networks from gene expression time series: characterization of correlation patterns. *Int. J. Bifurcation and Chaos* 17: 2477-2483 (DOI:10.1142/S0218127407018543).
104. Sedivy, J.M., Munoz-Najar, U.M., Jeyapalan, J.C. and Campisi, J. (2007). Cellular senescence: A link between tumor suppression and organismal aging? In: *The Molecular Biology of Aging*, L. Guarente and L. Partridge, Eds., Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY.
105. de Magalhaes, J.P., Sedivy, J.M., Finch, C.E., Austad, S.N. and Church, G.M. (2007). A proposal to sequence genomes of unique interest for research on aging. *J. Gerontol. A. Biol. Sci. Med. Sci.* 62: 583-584 (PMID: 17595413).
106. Klysik, J., Theroux, S.J., Sedivy, J.M., Moffit, J.S. and Boekelheide, K. (2008). Signaling crossroads: The function of Raf kinase inhibitory protein in cancer, the central nervous system and reproduction. *Cell Signal.* 20: 1-9 (PMID: 17706925).
107. Francesconi, M., Remondini, D., Neretti, N., Sedivy, J.M., Cooper, L.N., Verondini, E., Milanese, L. and Castellani, G.C. (2008). Reconstructing networks of pathways via significance analysis of their intersections. *BMC Bioinformatics* 9 (Suppl. 4): S9 (PMID: 18460182).
108. Rath, O., Park, S., Tang, H.H., Banfield, M.J., Brady, R.L., Lee, Y.C., Dignam, J.D., Sedivy, J.M., Kolch, W. and Yeung, K.C. (2008). The RKIP (Raf-1 Kinase Inhibitor Protein) conserved pocket binds to the phosphorylated N-region of Raf-1 and inhibits the Raf-1-mediated activated phosphorylation of MEK. *Cell Signal.* 20: 935-941 (PMID: 18294816).
109. Morrish, F., Neretti, N., Sedivy, J.M. and Hockenberry, D.M. (2008). The oncogene c-Myc coordinates regulation of metabolic networks to enable rapid cell cycle entry. *Cell Cycle* 7: 1056-1068 (PMID: 18414044).
110. Sedivy, J.M., Banumathy, G. and Adams, P.D. (2008). Aging by epigenetics – A consequence of chromatin damage? *Exp. Cell Res.* 314: 1909-1917 (PMID: 18423606).
111. Jeyapalan, J.C. and Sedivy, J.M. (2008). Cellular senescence and organismal aging. *Mech. Ageing Dev.* 129: 467-474 (PMID: 18502472).
112. Liu, Y.C., Li, F., Handler, J., Huang, C.R., Xiang, Y., Neretti, N., Sedivy, J.M., Zeller, K.I. and Dang, C.V. (2008). Global regulation of nucleotide biosynthetic genes by c-Myc. *PLoS ONE* 3: e2722 (PMID: 18628958).
113. Acosta, J. C., Ferrandiz, N., Bretones, G., Torrano, V., Blanco, R., Richard, C., O'Connell, B., Sedivy, J.M., Delgado, M. D. and Leon, J. (2008). Myc inhibits p27-induced erythroid differentiation of leukemia cells by repressing erythroid master genes without reversing p27-mediated cell cycle arrest. *Mol. Cell. Biol.* 28: 7286-7295 (PMID: 18838534).

114. Paul, E., Cronan, R., Weston, P.J., Boekelheide, K., Sedivy, J.M., Lee, S.Y., Wiest, D.L., Resnick, M.B. and Klysik, J.E. (2009). Disruption of Supv3L1 damages the skin and causes sarcopenia, loss of fat, and death. *Mamm. Genome* **20**: 92-108 (PMID: 19145458).
115. Campisi, J. and Sedivy, J.M. (2009). How does proliferative homeostasis change with age? What causes it and how does it contribute to aging? *J. Gerontol. A. Biol. Sci. Med. Sci.* **64**: 164-166 (PMID: 19228778).
116. Alves, H., Munoz-Najar, U., de Wit, J., Renard, A.J., Hoeijmakers, J.H., Sedivy, J.M., van Blitterswijk, C. and de Boer, J. (2009). A link between the accumulation of DNA damage and loss of multipotency of human mesenchymal stromal cells. *J. Cell. Mol. Med.* **14**: 2729-2738 (PMID: 19818093).
117. Sedivy, J.M. (2009). How to learn new and interesting things from model systems based on "exotic" biological species. *Proc. Natl. Acad. Sci. USA* **106**: 19207-19208 (PMID: 19906993).
118. Paul, E., Kielbasinski, M., Sedivy, J.M., Murga-Zamalloa, C., Khanna, H. and Klysik, J.E. (2009). Widespread expression of the Supv3L1 mitochondrial RNA helicase in the mouse. *Transgenic Res.* **4**: 691-701 (PMID: 19937380).
119. Adams, P.D. and Sedivy, J.M., editors (2010). *Cellular Senescence and Tumor Suppression*. Springer Press (ISBN: 978-1-4419-1074-5).
120. Jimenez, R.H., Lee, J.S., Francesconi, M., Castellani, G., Neretti, N., Sanders, J.A., Sedivy, J.M. and Gruppuso, P.A. (2010). Regulation of gene expression in hepatic cells by the mammalian Target of Rapamycin (mTOR). *PLoS One* **5**: e9084 (PMID: 20140209).
121. Agrawal, P., Yu, K., Salomon, A.R. and Sedivy, J.M. (2010). Proteomic profiling of Myc-associated proteins. *Cell Cycle* **9**: 4908-4921 (PMID: 21150319).
122. Munoz-Najar, U. and Sedivy, J.M. (2011). Epigenetic control of aging. *Antioxid. Redox Signal.* **14**: 241-259 (PMID: 20518699).
123. Kreiling, J.A., Tamamori-Adachi, M., Sexton, A.N., Jeyapalan, J.C., Munoz-Najar, U., Peterson, A.L., Manivannan, J., Rogers, E.S., Pchelintsev, N.A., Adams, P.D. and Sedivy, J.M. (2011). Age-associated increase in heterochromatic marks in murine and primate tissues. *Aging Cell* **10**: 292-304 (PMID: 21176091; PMCID 3079313).
124. Yap, C.S., Peterson, A.L., Castellani, G., Sedivy, J.M. and Neretti, N. (2011). Kinetic profiling of the c-Myc transcriptome and bioinformatic analysis of repressed gene promoters. *Cell Cycle* **10**: 2184-2196 (PMID 21623162; PMCID 3154366).
125. De Cecco, M., Jeyapalan, J., Zhao, X., Tamamori-Adachi, M. and Sedivy, J.M. (2011). Nuclear protein accumulation in cellular senescence and organismal aging revealed with a novel single-cell resolution fluorescence microscopy assay. *Aging (Albany NY)* **3**: 955-967 (PMID 22006542; PMCID 3229972).
126. Sedivy, J.M. (2011). Phosphatidylethanolamine Binding Protein aka Raf Kinase Inhibitor Protein: a brief history of its discovery and the remarkable diversity of biological functions. *Forum. Immunopathol. Dis. Therap.* **2**: 1-12.

127. Zwolinska, A.K., Whiting, A.H., Beekman, C., Sedivy, J.M. and Marine, J.C. (2011). Suppression of Myc oncogenic activity by nucleostemin haploinsufficiency. *Oncogene* **31**: 3311-3321 (PMID 22081066; PMCID 3370078).
128. Sanders, J.A., Schorl, C., Patel, A., Sedivy, J.M. and Gruppuso, P.A. (2012). Postnatal liver growth and regeneration are independent of *c-myc* in a mouse model of conditional hepatic *c-myc* deletion. *BMC Physiol.* **12**: 1-15 (PMID 22397685; PMCID 3353165).
129. Waaijer, M.E.C., van Heemst, D., Slagboom, P., de Craen, A.J.M., Westendorp, R.G.J., Sedivy, J.M., Gunn, D. and Maier, A.B. (2012). The number of p16INK4a positive cells in human skin reflects biological age. *Aging Cell* **11**: 722-725 (PMID 22612594; PMCID 3539756).
130. Moen, E.L., Wen, S., Anwar, T., Cross-Knorr, S., Brilliant, K., Birnbaum, F., Rahaman, S., Sedivy, J.M., Moss, S.F. and Chatterjee, D. (2012). Regulation of RKIP function by *Helicobacter pylori* in gastric cancer. *PLoS One* **7**: e37819 (PMID 22662230; PMCID: PMC3360604).
131. Jeyapalan, J.C. and Sedivy, J.M. (2013). How to measure RNA expression in rare senescent cells expressing any specific protein such as p16<sup>Ink4a</sup>. *Aging (Albany NY)* **5**: 120-129 (PMID 23454889; PMCID 3616199).
132. De Cecco, M., Criscione, S.W., Peckham, E.J., Hillenmeyer, S., Hamm, E.A., Manivannan, J., Peterson, A.L., Kreiling, J.A., Neretti, N. and Sedivy, J.M. (2013). Genomes of replicatively senescent cells undergo global epigenetic changes leading to gene silencing and activation of transposable elements. *Aging Cell* **12**: 247-256 (PMID 23360310; PMCID 3618682).