

Arnold J. Levine
PUBLICATIONS:

1. Levine AJ, Ginsberg, HS, 1967. Biochemical studies on the mechanism by which the fiber antigen inhibits multiplication of type 5 adenovirus. *J. Virol.* 1:747-757.
2. Ginsberg HS, Bello LJ, Levine A, 1967. Control of biosynthesis of host macromolecules in cells infected with adenovirus. In *Molecular Biology of Viruses*, (eds.) J. Colter and W. Paranchych, Academic Press, p. 577.
3. Levine AJ, Ginsberg HS, 1968. Role of adenovirus structural proteins in the cessation of host cell biosynthetic functions. *J. Virol.* 2:430-439.
4. Levine AJ, Sinsheimer RL, 1968. The process of infection with bacteriophage ϕ X174. XIX. Isolation and characterization of a chloramphenicol-resistant protein from 14u15X174-infected cells. *J. Mol. Biol.* 32:567-578.
5. Levine AJ, Sinsheimer RL, 1969. The process of infection with bacteriophage ϕ X174. XXV. Studies with bacteriophage ϕ X174 mutants blocked in progeny replicative form DNA synthesis. *J. Mol. Biol.* 39:619.
6. Levine AJ, Sinsheimer RL, 1969. The process of infection with bacteriophage ϕ X174. XXVII. Synthesis of a viral-specific chloramphenicol-resistant protein in ϕ X174-infected cells. *J. Mol. Biol.* 39:655.
7. Levine AJ, Sinsheimer, RL, 1969. Isolation of a chloramphenicol-resistant protein from lambda-infected cells. *Proc. Natl. Acad. Sci. USA* 62:1226-1228.
8. Levine AJ, Kang HS, Billheimer FE, 1970. DNA replication in SV40-infected cells. I. Analysis of replicating SV40 DNA. *J. Mol. Biol.* 50:549-568.
9. Levine AJ, Teresky AK 1970, DNA replication in SV40-infected cells. II. Detection and characterization of SV40 pseudovirions. *J. Virol.* 5:451-457.
10. Ritzi E, Levine, AJ, 1970. DNA replication in SV40-infected cells. III. Comparison of SV40 lytic infection in three different monkey kidney cell lines. *J. Virol.* 5:686-692.
11. Kang HS, Eshback TB, White DA, Levine AJ, 1971. DNA replication in SV40-infected cells. IV. Two different requirements for protein synthesis during SV40 DNA replication. *J. Virol.* 7:112-120.
12. Jaenisch, R, Levine AJ, 1971. DNA replication in SV40-infected cells. V. Circular and catenated oligomers of SV40 DNA. *Virology* 44:480-493.
13. Levine, AJ, 1971. Induction of Mitochondrial DNA synthesis in monkey cells infected by Simian Virus 40 and (or) treated with calf serum. *Proc. Natl. Acad. Sci. USA* 68:717-720.

14. Fox TO, Levine AJ, 1971. Relationship between virus- induced cellular deoxyribonucleic acid synthesis and transformation by Simian Virus 40. *J. Virol.* 7:473-477.
15. Sheppard JR, Levine,AJ, Burger MM, 1971. Cell-surface changes after infection with oncogenic viruses: Requirement for synthesis of host DNA. *Science* 172:1345-1346.
16. Burger MM, Noonan KD, Sheppard JR, Fox TO, Levine AJ, 1971. Requirements for the formation of a structural surface change after viral infection and the significance of this change for growth control. In *The Biology of Oncogenic Viruses*, (ed.) L.G. Silvestri, American Elsevier Publishing Company, p. 258.
17. Jaenisch, R., Mayer, A., and Levine, A.J. 1971. Replicating SV40 molecules containing closed circular template DNA strands. *Natl. New Biol.* 223:72-75.
18. Jaenisch, R., and Levine, A.J. 1971. Infection of primary African Green Monkey cells with SV40 monomeric and dimeric DNA. *J. Mol. Biol.* 61:735-738.
19. Jaenisch R, Levine AJ, 1972. DNA replication in SV40 infected cells. VI. The effect of cychloheximide on the formaton of SV40 oligomeric DNA. *Virology* 48:373-379.
20. Levine AJ, Burger MM, 1972. A working hypothesis explaining the maintenance of the transformed state by SV40 and polyoma. *J. Theor. Biol.* 37:435.
21. Dubbs DR, Kit S, Jaenisch R, Levine, AJ, 1972. Isolation of Simian Virus 40 recombinants from cells infected with oligomeric forms of Simian Virus 40 deoxyribonucleic acid. *J. Virol.* 9:717-719.
22. Mayer A, Levine, AJ, 1972. DNA replication in SV40 infected cells. VIII. The distribution of replicating molecules at different stages of replication in SV40 infected cells. *Virology* 50:328-338.
23. Levine AJ, 1973. A model for the maintenance of transformed state by polyoma and SV40. In *Prospectives in Virology VIII*, Academic Press, pp. 61-79.
24. Jaenisch R, Levine AJ, 1973. DNA replication in SV40-infected cells. VII. Formation of SV40 catenated and circular dimers. *J. Mol. Biol.* 73:199-212.
25. Levine AJ, 1973. The lectin binding and agglutination approach for detecting alterations in transformed cell surfaces induced by SV40 and polyoma. *PAABS Revista* 2:289-297.
26. Noonan K, Levine, AJ, Burger MM, 1973. Cell cycle dependent changes in the surface membrane as detected with [³H] Concanavalin A. *J. Cell Biol.* 58:491-497.
27. Ritzi EM, Levine AJ, 1973. The fragmentation of cellular DNA and the formation of pseudovirions during SV40 infection of African Green Monkey kidney cells. *J. Gen. Virol.* 20:353-367.

28. van der Vliet PC, Levine AJ, 1973. DNA binding proteins specific for cells infected by adenovirus. *Natl. New Biol.* 246:170-174.
29. Laipis P, Levine AJ, 1973. DNA replication in SV40-infected cells. IX. The inhibition of a gap-filling step during discontinuous synthesis of SV40 DNA. *Virology* 56:580-594.
30. Laipis PJ, Levine AJ, 1973. An analysis of the structure of the replicating fork during discontinuous synthesis of SV40 DNA and the detection of gap circle intermediates. In *Tumor Virus-Host Cell Interaction* (ed.) A. Kolber, Plenum Press, New York, p. 21.
31. van der Vliet PC, Levine AJ, 1973. The isolation and characterization of DNA binding proteins specific for adenovirus infected cells. In *Tumor Virus-Host Cell Interaction* (ed.) A. Kolber, Plenum Press, New York, p. 197.
32. Sen A, Levine AJ, 1974. SV40 nucleoprotein complex activity unwinds superhelical turns in SV40 DNA. *Nature* 249:343-344.
33. Levine AJ, 1974. The replication of papovavirus DNA. *Prog. Med. Virol.* 17:1-37.
34. Levine AJ, Jaenisch R, Mayer A, Sen A, Hancock R, 1974. The replication of Simian Virus 40 DNA. In *Mechanism and Regulation of DNA Replication* (eds.) A. Kolber and M. Kohiyama, Plenum Press, New York, pp. 339-367.
35. Teresky AK, Marsden M, Kuff EL, Levine AJ, 1974. Morphological criteria for the *in vitro* differentiation of embryoid bodies produced by a transplantable teratoma of mice. *J. Cellular Physiol.* 84:319-322.
36. Levine AJ, Torosian M, Sarokhan AJ, Teresky AK, 1974. Biochemical criteria for the *in vitro* differentiation of embryoid bodies produced by a transplantable teratoma of mice. The production of acetylcholine esterase and creatine phosphokinase by teratoma cells. *J. Cell. Physiol.* 84:311-318.
37. Sen A, Hancock R, and Levine AJ, 1974. The properties and origin of the proteins in the SV40 nucleoprotein complexes. *Virology* 61:11-21.
38. Levine AJ, van der Vliet PC, Rosenwirth B, Rabek J, Frenkel G, and Ensinger M, 1974. Adenovirus-infected cell- specific DNA-binding proteins. *Cold Sprng. Hbr. Symp. Quant. Biol.* 39:559-566.
39. Postel EH, Levine AJ, 1974. The regulation of deoxypyrimidine kinases in normal, transformed and infected mouse cells in culture. In *Fundamental Aspects of Neoplasia* (eds.) Gottlieb, A, Plascia, OJ, Bishop, DHL, Springer-Verlag, New York, pp. 337-353.
40. van der Vliet PC, Levine AJ, Ensinger MS, Ginsberg HS, 1975. Thermolabile DNA binding proteins from cells infected with a temperature-sensitive mutant of adenovirus defective in viral DNA synthesis. *J. Virol.* 15:348-354.

41. Postel EH, Levine AJ, 1975. Studies on the regulation of deoxypyrimidine kinases in normal, SV40-transformed and SV40- adenovirus-infected mouse cells in culture. *Virology* 63:404-420.
42. Rosenwirth B, Shiroki K, Levine AJ, Shimojo H, 1975. Isolation and characterization of adenovirus type 12 DNA binding proteins. *Virology* 67:14-23.
43. Hall JD, Marsden M, Rifkin D, Teresky AK, Levine AJ, 1975. The *in vitro* differentiation of embryoid bodies produced by a transplantable teratoma of mice. In *Teratomas and Differentiation*, Academic Press, New York, p. 251.
44. Sen A, Laipis PJ, Levine AJ, 1975. DNA replication in SV40-infected cells. XI. The properties of SV40 DNA and the nucleoprotein complex synthesized in the presence of cycloheximide. *Interviol.* 5:122-136.
45. Laipis PJ, Sen A, Levine AJ, Mulder C, 1975. DNA replication in SV40 infected cells X. The structure of the 16S gap circle intermediate in SV40 DNA synthesis. *Virology* 68:115-123.
46. Laipis PJ, Sen A, Levine AJ, Mulder C, 1975. Discontinuous SV40 DNA synthesis and the detection of gap circle intermediates. In *DNA Synthesis and Its Regulation* (eds.) M. Goulian, P. Hanawalt, and C.F. Fox, W. A. Benjamin, Inc., p. 361.
47. Levine AJ, van der Vliet PC, Sussenbach JS, 1976. The replication of papovavirus and adenovirus DNA. In *Current Topics in Microbiology and Immunology*, Springer-Verlag, Heidelberg, 73:67-124.
48. Shiroki K, Shimojo H, Sekikawa K, Fujinaga K, Rabek J, Levine AJ, 1976. Suppression of the temperature-sensitive character of adenovirus 12 early mutants in monkey cells transformed by an adenovirus 7-SV40 hybrid. *Virology* 69:431-437.
49. Rosenwirth B, Anderson C, Levine AJ, 1976. Tryptic fingerprint analysis of adenovirus types 2, 5 and 12 DNA-binding proteins. *Virology* 69:617-625.
50. Levinson A, Levine AJ, Anderson S, Osborn M, Rosenwirth B, Weber K, 1976. The relationship between group C adenovirus tumor antigen and the adenovirus single-strand DNA-binding protein. *Cell* 7:575-584.
51. Levine AJ, van der Vliet PC, Rosenwirth B, Anderson C, Rabek J, Levinson A, Anderson S, 1976. Characterization of an adenovirus early protein required for viral DNA replication: A single strand specific DNA binding protein. *Mol. Cell. Biochem.* 11:79-96.
52. Postel EH, Levine AJ, 1976. The requirement of Simian Virus 40 gene A product for the stimulation of cellular thymidine kinase activity after viral infection. *Virology* 73:206-215.
53. Topp W, Hall JD, Marsden M, Teresky AK, Rifkin D, Levine AJ, Pollack R, 1976. *In vitro* differentiation of teratomas and the distribution of creatine phosphokinase and plasminogen activator in teratocarcinoma derived cells. *Cancer Res.* 36:4217-4223.

54. Levine AJ, 1976. Summation: Molecular Mechanisms of Gene Regulation, Kroc Foundation on Regulation of Gene Expression in Development and Neoplasia, June 2-5, Santa Ynez, California. *Cancer Res.* 36:4295-4296.
55. Levine AJ, 1976. SV40 and adenovirus early functions involved in DNA replication and transformation. *Biochim. Biophys. Acta.* 458:213-241.
56. Levinson A, and Levine AJ, 1977. The isolation and identification of the adenovirus group C tumor antigens. *Virology* 76:1-11.
57. Levine AJ, 1977. Cancer and Viruses. *Chemistry* 50:7-11.
58. Levinson AD, Postel EH, Levine AJ, 1977. *In vivo* and *in vitro* phosphorylation of the adenovirus type 5 single-stranded specific DNA binding protein. *Virology* 79:144-159.
59. Topp W, Hall JD, Rifkin D, Levine AJ, Pollack, R, 1977. The characterization of SV40-transformed cell lines derived from mouse teratocarcinoma: Growth properties and differentiated characteristics. *J. Cell. Physiol.* 93:269-276.
60. Levinson AD, Levine AJ, 1977. The group C adenovirus tumor antigens: Identification in infected and transformed cells and a peptide map analysis. *Cell* 11:871-879.
61. Levine AJ, 1977. Cancer, The Outlaw Cell, Chapter 8, (ed.) R.E. LaFond, *American Chemical Society Journal*.
62. Levine AJ, 1978. Approaches to mapping the temporal events in the cell cycle using conditional lethal mutants. *J. Cell. Physiol.* 95:387-392.
63. Postel EH, Klein H, Levine AJ, 1978. The fidelity of phosphorylation of the adenovirus DNA-binding protein by an *in vitro* nuclear protein kinase from virus-infected cells. *Virology* 86:291-294.
64. Holland JJ, Levine AJ, 1978. Mechanisms of viral persistence. *Cell* 14:467-472.
65. Ross SR, Linzer DIH, Flint SJ, Levin, AJ, 1978. The adenovirus and SV40 tumor antigens detected in adenovirus and adenovirus-SV40 hybrid virus transformed cells. In *Persistent Viruses* (eds.) J. Stevens, G.J. Todaro and C.F. Fox, Academic Press, New York, pp. 469-484.
66. Garber EA, Seidman MM, Levine AJ, 1978. The detection and characterization of multiple forms of SV40 nucleoprotein complexes. *Virology* 90:305-316.
67. Levine AJ, 1979. Permanent teratocarcinoma derived cell lines stabilized by SV40 transformation. In *Methods in Cancer Research* 18:333-357.
68. Maltzman W, Linzer DIH, Brown F, Teresky AK, Rosenstrauss M, Levine AJ 1979. Permanent teratocarcinoma derived cell lines stabilized by transformation with SV40 and SV40tsA mutant viruses. *J. Int. Cytol. Suppl.* 10:173-189.

69. Linzer DIH, Levine AJ, 1979. Characterization of a 54,000 MW cellular SV40 tumor antigen present in SV40-transformed cells and uninfected embryonal carcinoma cells. *Cell* 17:43-52.
70. Rosenstrauss MJ, Levine AJ, 1979. Alterations in the developmental potential of embryonal carcinoma cells in mixed aggregates of nullipotent and pluripotent cells. *Cell* 17:337-346.
71. Seidman MM, Garber EA, Levine AJ, 1979. Parameters affecting the stability of SV40 virions during the extraction of nucleoprotein complexes. *Virology* 95:256-259.
72. Segal S, Levine AJ, Khoury G, 1979. Evidence for nonspliced SV40 RNA in undifferentiated murine teratocarcinoma cells. *Nature* 280:335-338.
73. Siegler EL, Tick N, Teresky AK, Rosenstrauss M, Levine AJ, 1979. Teratocarcinoma transplantation rejection loci: An H-2 linked tumor rejection locus. *Immunogenetics* 9:207-220.
74. Linzer DIH, Maltzman W, Levine AJ, 1979. The SV40 A gene product is required for the production of a 54,000 MW cellular tumor antigen. *Virology* 98:308-318.
75. Seidman MM, Levine AJ Weintraub H, 1979. The asymmetric segregation of parental nucleosomes during chromosome replication. *Cell* 18:439-449.
76. Klein H, Maltzman W, Levine AJ, 1979. Structure-function relationships of the adenovirus DNA-binding protein. *J. Biol. Chem.* 254:11051-11060.
77. Ross S, Levine AJ 1979. The genomic map position of the adenovirus type 2 glycoprotein. *Virology* 99:427-430.
78. Balint RF, Linzer DIH, Khoury G, Levine AJ, 1980. The expression of SV40 large T antigen in embryonal carcinoma-SV40 transformed somatic cell hybrids. *Virology* 100:492-494.
79. Ross SR, Flint SJ, Levine AJ, 1980. Identification of the adenovirus early proteins and their genomic map positions. *Virology* 100:419-432.
80. Ariga H, Klein H, Levine AJ, Horwitz MS, 1980. A cleavage product of the adenovirus DNA binding protein is active in DNA replication in vitro. *Virology* 101:307-310.
81. Ross SR, Levine AJ, Galos RS, Williams J, Shenk T, 1980. Early viral proteins in HeLa cells infected with adenovirus type 5 host range mutants. *Virology* 103:475-492.
82. Rosenstrauss MJ, Balint RF, Levine AJ, 1980. Pluripotency of somatic cell hybrids between nullipotent and pluripotent embryonal carcinoma cells. *Somat. Cell Genet.* 6:555-565.
83. Linzer DIH, Maltzman W, Levine AJ, 1980. Characterization of a murine cellular SV40 T antigen in SV40-transformed cells and uninfected embryonal carcinoma cells. *Cold Spring Harbor Symp. Quant. Biol.* 44:215-224.

84. Axelrod H, Levine AJ, 1980. Expression of SV40 tumor antigen in SV40-transformed teratocarcinoma-derived cell lines. *J. Cell. Physiol.* 104:249-252.
85. Garber EA, Seidman MM, Levine AJ, 1980. Intracellular SV40 nucleoprotein complexes: Synthesis to encapsidation. *Virology* 107:389-401.
86. Levine AJ, 1980. Workshop summary: Adenovirus, SV40, polyoma. In *Animal Virus Genetics* (eds.) B. Fields, R. Jaenisch and C.F. Fox, ICN-UCLA Symp., Academic Press, New York, pp. 795-798.
87. Nicolas JC, Suarez F, Levine AJ, Girard M, 1981. Temperature-independent revertants of adenovirus H5ts125 and H5ts107 mutants in the DNA binding protein: Isolation of a new class of host range temperature conditional revertants. *Virology* 108:521-524.
88. Oren M, Maltzman W, Levine AJ, 1981. Post-translational regulation of the 54K cellular tumor antigen in normal and transformed cells. *Mol. Cell. Biol.* 1:101-110.
89. Maltzman W, Levine AJ, 1981. Viruses as probes for development and differentiation. *Advances in Virus Research* 26:65-116.
90. Rabek JP, Zakian VA, Levine AJ, 1981. The SV40 A gene product suppresses the adenovirus H5ts125 defect in DNA replication. *Virology* 109:290-302.
91. Sekikawa K, Levine AJ, 1981. Isolation and characterization of polyomas host range mutants that replicate in nullipotent embryonal carcinoma cells. *Proc. Natl. Acad. Sci. USA* 78:1100-1104.
92. Maltzman W, Sekikawa K, Levine AJ, 1981. Papovaviruses as probes to study developmental changes in embryonal carcinoma cells. In *International Cell Biology* (ed.) H.G. Schweiger, Springer-Verlag, Heidelberg, Germany, pp. 552-556.
93. Maltzman W, Oren M, Levine AJ, 1981. The structural relationships between 54,000 molecular-weight cellular tumor antigens detected in viral and nonviral-transformed cells. *Virology* 112:145-156.
94. Oren M, Levine AJ, 1981. Immunoselection of Simian Virus 40 large T antigen messenger RNAs from transformed cells. *Virology* 113:790-793.
95. Levine AJ, Teresky AK, 1981. Teratocarcinoma transplantation rejection loci: Genetic localization of the Gt-1 locus on chromosome 17 and the expression of alternate alleles. *Immunogenetics* 13:405-412.
96. Nicolas JC, Levine AJ, 1981. Multiplicity-dependent host range restriction of human adenovirus in human embryonal carcinoma cells. *Virology* 113:787-789.
97. Sekikawa K, Ohtsubo E, Ito Y, Levine AJ, 1981. Polyoma host range mutants that replicate in embryonal carcinoma cells. In *Cellular Responses to Molecular Modulators 18* (eds.) L.W. Mozes, J. Schultz, W.A. Scott and R. Werner, Academic Press, New York, pp. 79-90.

98. Logan J, Nicolas JC, Topp W, Girard M, Shenk T, Levine AJ, 1981. Transformation by adenovirus early region 2A temperature-sensitive mutants and their revertants. *Virology* 115:419-422.
99. Sarnow P, Ho YS, Williams J, Levine AJ, 1982. Adenovirus E1b-58kd tumor antigen and SV40 large tumor antigen are physically associated with the same 54kd cellular protein in transformed cells. *Cell* 28:387-394.
100. Reich N, Levine AJ, 1982. Specific interaction of the SV40 T antigen-cellular p53 protein complex with SV40 DNA. *Virology* 117:286-290.
101. Oren M, Reich NC, Levine AJ, 1982. Regulation of the cellular p53 tumor antigen in teratocarcinoma cells and their differentiated progeny. *Mol. Cell. Biol.* 2:443-449.
102. Oren M, Maltzman W, Levine AJ, 1982. Post-translational regulation of the 54K cellular tumor antigen in SV40 transformed cells. In *Genes and Tumor Genes*, (eds.) E. Winnacker and H.H. Schoene, Raven Press, New York, pp. 49-56.
103. Levine AJ, Kaplan L, Oren M, Reich N, Sarnow P, Sullivan C, Thomas R, 1982. The regulation of a cellular protein, p53, in transformed cells and its association with viral tumor antigens. *Hepatology* 2:58S-60S.
104. Sarnow P, Sullivan CA, Levine AJ, 1982. A monoclonal antibody detecting the adenovirus type 5 E1b-58kd tumor antigen: Characterization of the E1b-58kd tumor antigen in adenovirus- infected and transformed cells. *Virology* 120:510-517.
105. Schutzbank T, Robinson R, Oren M, Levine AJ, 1982. SV40 large tumor antigen can regulate some cellular transcripts in a positive fashion. *Cell* 30:481-490.
106. Schutzbank T, Levine AJ, 1982. Cells transformed by a wide variety of agents express higher abundance levels of some cellular RNA species. *J. Cell Biochem.* 19:287-293.
107. Levine AJ, Oren M, Reich N, Sarnow P, 1982. The mechanisms regulating the levels of the cellular p53 tumor antigen in transformed cells. In *Advances in Viral Oncology II. The Transformation-Associated Cellular p53 Proteins* (ed.) G. Klein, Raven Press, New York, pp. 81-102.
108. Levine AJ, 1982. The nature of the host range restriction of SV40 and polyoma viruses in embryonal carcinoma cells. In *Current Topics in Microbiology and Immunology* (eds.) T. Graf and R. Jaenisch, Springer-Verlag, pp. 1-30.
109. Nicolas JC, Ingrand D, Sarnow P, Levine AJ, 1982. A mutation in the adenovirus type 5 DNA binding protein that fails to autoregulate the production of the DNA binding protein. *Virology* 122:481-485.
110. Levine AJ, 1982. Transformation-associate tumor antigens. In *Advances in Cancer Research*, Vol. 37, (eds.) G. Klein and S. Weinhouse, Academic Press, pp. 75-109.

111. Robinson R, Schutzbank T, Oren M, Levine AJ, 1982. Regulation of the levels of cellular transcripts by SV40 large T antigen. In *Cell Proliferation, Cancer and Cancer Therapy* (ed.) R. Baserga, Annals of the New York Academy of Sciences, Vol. 397, pp. 221-228.
112. Sarnow P, Hearing P, Anderson C, Reich N, Levine AJ, 1982. Identification and characterization of an immunologically conserved adenovirus early region 11,000 M_r protein and its association with the nuclear matrix. *J. Mol. Biol.* 162:565.
113. Oren M, Levine AJ, 1983. Molecular cloning of a cDNA specific for the murine p53 cellular tumor antigen. *Proc. Natl. Acad. Sci. USA* 80:56-59.
114. Levine AJ, Reich N, Thomas R, 1983. The regulation of a cellular protein, p53, in normal and transformed cells. In *Oncogenes and Retroviruses: Evaluation of Basic Findings and Clinical Potential* (eds.) T. E. O'Connor and F. J. Rauscher, Jr., Alan R. Liss, Inc., New York, pp. 159-169.
115. Nicolas JC, Sarnow P, Girard M, Levine AJ, 1983. Host range temperature-conditional mutants in the adenovirus DNA binding protein are defective in the assembly of infectious virus. *Virology* 126:228-239.
116. Nicolas JC, Young CSH, Suarez F, Girard M, Levine, AJ, 1983. Detection, rescue and mapping of mutations in the adenovirus DNA binding protein gene. *Proc. Natl. Acad. Sci. USA* 80:1674-1677.
117. Levine AJ, Schutzbank T, Robinson R, 1983. The control of cellular transcripts in transformed cells. In *Genes and Proteins in Oncogenesis* (eds.) I.B. Weinstein, H.J. Vogel, Academic Press, Inc., New York.
118. Varmus H, Levine AJ (eds.) 1983. In *Readings in Tumor Virology*, Cold Spring Harbor Press, New York.
119. Reich NC, Sarnow P, Duprey E, Levine AJ, 1983. Monoclonal antibodies which recognize native and denatured forms of the adenovirus DNA-binding protein. *Virology* 128:480-484.
120. Scolnick E, Levine AJ (eds.) 1983. In *Tumor Viruses and Differentiation*, UCLA Symposia on Molecular and Cellular Biology, Vol. 5, Alan R. Liss, Inc., New York.
121. Schutzbank T, Levine AJ, 1983. Cells transformed by a wide variety of agents express higher abundance levels of some cellular RNA species. In *Tumor Viruses and Differentiation*, (eds.) E. Scolnick, and A.J. Levine, Alan R. Liss, Inc., New York, pp. 41-47.
122. Reich NC, Oren M, Levine, AJ, 1983. Two distinct mechanisms regulate the levels of a cellular tumor antigen, p53. *Mol. and Cell. Biol.* 3:2143-2150.
123. Thomas R, Kaplan L, Reich N, Lane DP, Levine AJ, 1983. Characterization of human p53 antigens employing primate specific monoclonal antibodies. *Virology* 131:502-517.

124. Nowak, B, Sullivan, C, Sarnow, P, Thomas, R, Bricout, F, Nicolas, JC, Fleckenstein, B, Levine, AJ, 1984. Characterization of monoclonal antibodies and polyclonal immune sera directed against human cytomegalovirus virion proteins. *Virology* 132:325-338.
125. Sarnow, P, Hearing, P, Anderson, CW, Halbert, DN, Shenk, T, Levine, AJ, 1984. Adenovirus early region 1B 58,000-dalton tumor antigen is physically associated with an early region 425,000-dalton protein in productively infected cells. *J. Virol.* 49:692-700.
126. Reich, NC, Levine, AJ, 1984. Growth regulation of a cellular tumor antigen, p53, in nontransformed cells. *Nature* 308:199-201.
127. Levine, AJ, 1984. Viruses and differentiation: The molecular basis of viral tissue tropisms. In *Concepts in Viral Pathogenesis* (eds.) A. Notkins and M. Oldstone, Springer-Verlag, New York, Chapter 19, pp. 130-134.
128. Nowak, B, Gmeiner, A, Sarnow, P, Levine, AJ, Fleckenstein, B, 1984. Physical mapping of human cytomegalovirus genes: Identification of DNA sequences coding for a virion phosphoprotein of 71 kDa and a viral 65 kDa polypeptide. *Virology* 134:91-102.
129. Levine, AJ, 1984. The adenovirus early proteins. In *Current Topics in Microbiology and Immunology, The Molecular Biology of Adenoviruses*, 2, (ed.) W. Doerfler, Vol. 110, pp. 143-167.
130. Pennica, D, Goeddel, DV, Hayflick, JS, Reich, NC, Anderson, CW, Levine, AJ, 1984. The amino acid sequence of murine p53 determined from a cDNA clone. *Virology* 134:477-482.
131. Levine, AJ, Vande Woude, GF, Topp, WC, Watson, JD (eds.) 1984. *Cancer Cells*, Vol. 1, The Transformed Phenotype, Cold Spring Harbor Press.
132. Vande Woude, GF, Levine, AJ, Topp, WC, Watson, JD (eds.) 1984. *Cancer Cells*, Vol. 2, Oncogenes and Viral Genes, Cold Spring Harbor Press.
133. Hearing, J, Levine, AJ, 1984. Expression and mapping of an Epstein-Barr virus nuclear antigen: EBNA. In *Cancer Cells*, Vol. 2, Oncogenes and Viral Genes (eds.) G.F. Vande Woude, A.J. Levine, W.C. Topp, and J.D. Watson, Cold Spring Harbor Laboratory, pp. 411-418.
134. Hearing, JC, Nicolas, JC, Levine, AJ, 1984. Identification of Epstein-Barr virus sequences that encode a nuclear antigen expressed in latently infected lymphocytes. *Proc. Natl. Acad. Sci. USA* 81:4373-4379.
135. Brinster, RL, Chen, HY, Messing, A, van Dyke, T, Levine, AJ, Palmiter, RD, 1984. Transgenic mice harboring SV40 T antigen genes develop characteristic brain tumors. *Cell* 37:367-379.
136. Hearing, JC, Lewis, A, Levine, AJ, 1985. Structure of the Epstein-Barr virus nuclear antigen as probed with monoclonal antibodies. *Virology* 142:215-220.

137. Hearing, JC, Levine, AJ, 1985. The Epstein-Barr virus nuclear antigen (BamHI K antigen) is a single-stranded DNA binding phosphoprotein. *Virology* 145:105-116.
138. Lupton, S, Levine, AJ, 1985. Mapping genetic elements of Epstein-Barr virus that facilitate extrachromosomal persistence of Epstein Barr virus-derived plasmids in human cells. *Mol. Cell. Biol.* 5:2533-2542.
139. van Dyke, T, Finlay, C, Levine, AJ, 1985. A comparison of several lines of transgenic mice containing the SV40 early genes. In *The Molecular Basis of Developmental Biology*, Cold Spring Harbor Symp. Quant. Biol., Vol. 50.
140. Levine, AJ, 1985. Virus vector-mediated gene transfer. In *Engineering Organisms in the Environment: Scientific Issues*, (eds.) H.O. Halvorson, D. Pramer and M. Rogul, Proceedings of a Cross-Disciplinary Symposium, Philadelphia, Pennsylvania.
141. Levine, AJ, 1985. Transgenic animals: Impact on safety evaluation. In *Toxicology in the Nineties*, Ciba-Giegy International, Toxicology Workshop, Mary Ann Liebert, Inc., pp. 77-83.
142. Lupton, S, Levine, AJ, 1986. Characterization of the genetic signals required for Epstein-Barr virus plasmid maintenance. In *Cancer Cells*, Vol. 4, DNA Tumor Viruses: Control of Gene Expression and Replication, Cold Spring Harbor Press, pp. 543-553.
143. Tan, T-H, Wallis, J, Levine, AJ, 1986. Identification of the p53 protein domain involved in the formation of the SV40 large T antigen p53 protein complex. *J. Virol.* 59:574-583.
144. Tilghman, SM, Levine, AJ, 1986. Transgenic mice: Gene transfer into the germ line. In *Gene Transfer*, (ed.) R. Kucherlapati, Plenum Press, pp. 189-221.
145. Wong, KM, Levine, AJ, 1986. Identification and mapping of Epstein-Barr virus early antigens and demonstration of a viral gene activator that functions in trans. *J. Virol.* 60:149-156.
146. Yagaloff, KA, Lozano, G, van Dyke, T, Levine, AJ, Hartig, PR, 1986. Serotonin 5-HT_{1C} receptors are expressed at high density on choroid plexus tumors from transgenic mice. *Brain Res.* 385:389-394.
147. Ostapchuk, P, Diffley, JFX, Bruder, JT, Stillman, B, Levine, AJ, Hearing, P, 1986. Interaction of a nuclear factor with the polyomavirus enhancer region. *Proc. Natl. Acad. Sci. USA* 83:8550-8554.
148. Lupton, S, Chittenden, T, Levine, AJ, 1987. Genetic elements of Epstein-Barr virus required for extrachromosomal persistence in cells. In *Current Communications in Molecular Biology*, (eds.) J.H. Miller and M.P. Calos, Cold Spring Harbor Laboratory, New York.

149. van Dyke, TA, Finlay, C, Miller, D, Marks, J, Lozano, G, Levine, AJ, 1987. Relationship between tumor formation and SV40 T antigen expression in transgenic mice containing the SV40 early region genes. In *Current Communications in Molecular Biology*, (eds.) J.H. Miller and M.P. Calos, Cold Spring Harbor Laboratory, New York.
150. van Dyke, T.A., Finlay, C., Miller, D., Marks, J., Lozano, G., and Levine, A.J. 1987. Relationship between Simian Virus 40 large tumor antigen expression and tumor formation in transgenic mice. *J. Virol.* 61:2029-2032.
151. Levine, A.J. 1987. Virus vector-mediated gene transfer. *Microbiol. Sciences* 4(8):245-250.
152. Hinds, P., Finlay, C., Frey, A., and Levine, A.J. 1987. Immunological evidence for the association of p53 with a heat shock protein, hsc70, in p53 plus ras transformed cell lines. *Mol. Cell. Biol.* 7:2863-2869.
153. Finlay, C., Hinds, P., Frey, A., and Levine, A.J. 1987. Mutations which activate p53 transformation with ras produce an altered p53 protein that preferentially binds to a heat shock protein, hsc70. In *Nuclear Oncogenes, Current Communications in Molecular Biology*, (Eds.) F.W. Alt, E. Harlow and E.B. Ziff, Cold Spring Harbor Press pp. 126-132.
154. Levine, A.J. 1987. The molecular biology of adenoviruses. In *The Molecular Basis of Viral Replication*, (ed.) R. Perez-Bercoff, Plenum Press, New York, pp. 483-495.
155. Seiberg, M., Kessler, M., Levine, A.J., and Aloni, J. 1987. Human RNA polymerase II can prematurely terminate transcription of the adenovirus type 2 late transcription unit at a precise site that resembles a procaryotic termination signal. *Virus Genes* 1(1):97-116.
156. Lubbert, H., Hoffman, B.J., Snutch, T.P., van Dyke, T., Levine, A.J., Hartig, P.R., Lester, H.A., and Davidson, N. 1987. cDNA cloning of a serotonin 5-HT_{1C} receptor using electrophysiological assays of mRNA injected xenopus oocytes. *Proc. Natl. Acad. Sci. USA* 84:4332-4336.
157. Marks, J., Lin, J., Miller, D., Lozano, G., Herbert, J., and Levine, A.J. 1988. The expression of viral and cellular genes in papillomas of the choroid plexus induced in transgenic mice. In *Cellular Factors in Development and Differentiation: Embryos, Teratocarcinomas and Differentiated Tissues*, (eds.) S.E. Harris and P.E. Mansson, Alan R. Liss, Inc., New York, pp. 163-186.
158. Levine, A.J. 1988. Cancer, viruses and oncogenes. In *Cancer, The Outlaw Cell*, 2nd Ed., (ed.) R.E. LaFond, American Chemical Society Books, Washington, DC, pp. 57-74.
159. Finlay, C.A., Hinds, P.W., Tan, T.-H., Eliyahu, D., Oren, M., and Levine, A.J. 1988. Activating mutations for transformation by p53 produce a gene product that forms an hsc70-p53 complex with an altered half-life. *Mol. Cell. Biol.* 8(2):531-539.
160. Levine, A.J. 1988. Oncogenes of DNA tumor viruses. *Cancer Res.* 48:493-496.

161. Clarke, C.F., Cheng, K., Frey, A.B., Stein, R., Hinds, P.W., and Levine, A.J. 1988. Purification of complexes of nuclear oncogene p53 with rat and *Escherichia coli* heat shock proteins: *In vitro* dissociation of hsc70 and dnaK from murine p53 by ATP. *Mol. Cell. Biol.* 8(3):1206-1215.
162. Wong, K.M., and Levine, A.J. 1989. Characterization of proteins encoded by the Epstein-Barr virus transactivator gene BMLF1. *Virology* 168:101-111.
163. Seiberg, M., Aloni, J., and Levine, A.J. 1989. The adenovirus type 2 DNA binding protein interacts with the major late promoter attenuator RNA. *J. Virol.* 63:1134-1141.
164. Hinds, P., Finlay, C., and Levine, A.J. 1989. Mutation is required to activate the p53 gene for cooperation with the ras oncogene and transformation. *J. Virol.* 63:739-746.
165. Marks, J.R., Lin, J., Hinds, P., Miller, D., and Levine, A.J. 1989. Cellular gene expression in papillomas of the choroid plexus from transgenic mice that express the Simian Virus 40 large T antigen. *J. Virol.* 63:790-797.
166. Chittenden, T., Lupton, S., and Levine, A.J. 1989. Functional limits of OriP, the Epstein-Barr virus plasmid origin of replication. *J. Virol.* 63(7):3016-3025.
167. Clarke, C.F., Cheng, K., Frey, A.B., Stein, R., Hinds, P.W., Finlay, C.A., and Levine, A.J. 1989. Purification and properties of p53-heat shock protein complexes from *E. coli* and transformed rat cells. Regulation of Viral Gene Expression, George Khoury Memorial Symposium, Washington, DC.
168. Finlay, CA, Hinds, PW, Levine, AJ, 1989. The p53 proto-oncogene can act as a suppressor of transformation. *Cell* 57(7):1083-1093.
169. Seiberg, M., Aloni, Y., and Levine, A.J. 1989. A comparison of human and monkey cells for their ability to attenuate transcripts that begin at the adenovirus major late promoter. *J. Virol.* 63(9):4093-4096.
170. Cho, H.J., Seiberg, M., Georgoff, I., Teresky, A.K., Marks, J.R., and Levine, A.J. 1989. The impact of the genetic background of transgenic mice upon the formation and timing of choroid plexus papillomas. *J. Neuroscience Res.* 24(1):115-122.
171. Levine, A.J. 1989. Part V. Introduction. In *Current Topics in Microbiology and Immunology*, Vol. 144. (eds.) R. Knippers and A.J. Levine, Springer-Verlag Berlin, Heidelberg, Germany, pp. 219-225.
172. Levine, A.J. 1989. Expression of SV40 early region genes in transgenic mice. In *Concepts in Viral Pathogenesis III.* (eds.) A.L. Notkins and M.B.A. Oldstone, Springer-Verlag New York, Inc., pp. 158-163.
173. Frey, A., Chittenden, T., and Levine, A.J. 1989. Epstein-Barr virus DNA replication. In *Current Topics in Microbiology and Immunology*, Vol. 144. (eds.) R. Knippers and A.J. Levine, Springer-Verlag Berlin, Heidelberg, Germany, pp. 227-232.

174. Levine, A.J., Finlay, C.A., and Hinds, P.W. 1989. The p53 proto-oncogene and its product. In *Papilloma, SV40 and Polyoma Viruses*. Chapter 2. Common Mechanisms of Transformation by Small DNA Tumor Viruses. (ed.) L.P. Villarreal, American Society for Microbiology, Washington, DC, pp. 21-37.
175. Hinds, P.W., Finlay, C.A., and Levine, A.J. 1989. The p53 proto-oncogene can suppress transformation by other oncogenes and mutations in the proto-oncogene can activate the gene for transformation. In *Papilloma, SV40 and Polyoma Viruses*. Chapter 7. Common Mechanisms of Transformation by Small DNA Tumor Viruses. (ed.) L.P. Villarreal, American Society for Microbiology, Washington, DC, pp. 83-101.
176. Finlay, C.A., Hinds, P.W., and Levine, A.J. 1989. Mutation is required to activate several transforming properties of the p53 proto-oncogene. In *Current Communications in Molecular Biology: Recessive Oncogenes and Tumor Suppression*. Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, pp. 145-151.
177. Levine, A.J. 1989. The SV40 large tumor antigen. In *Molecular Biology of Chromosome Function*, Chapter 4. (ed.) K.W. Adolph, Springer-Verlag, New York, pp. 71-96.
178. Voelkerding, K.V., Sandhous, L.M., Kim, H.C., Wilson, J., Chittenden, T., Levine, A.J., and Raska, K., Jr. 1989. Plasma cell malignancy in the acquired immune deficiency syndrome. *Amer. J. Clin. Path.* 92(2):222-228.
179. Frey, A.B. and Levine, A.J. 1989. p53-plus-ras-transformed rat embryo fibroblasts express tumor-specific transplantation antigen activity which is shared by independently transformed cells. *J. Virol.* 63(12):5440-5444.
180. Strauss, E.G., Strauss, J.H., and Levine, A.J. 1989. Virus Evolution. In *Fields Virology*, 2nd Ed., Vol. 1, Chapter 9. (eds.) B.N. Fields and D.M. Knipe, Raven Press, New York, pp. 167-190.
181. Levine, A.J. 1990. Tumor Suppressor Genes. *BioEssays* 12(2):60-66.
182. Werness, BA, Levine, AJ, Howley, PM, 1990. Association of human papillomavirus types 16 and 18 E6 proteins with p53. *Science* 248:76-79.
183. Levine, A.J. and Momand, J. 1990. Tumor suppressor genes: The p53 and retinoblastoma sensitivity genes and gene products. *Biochim. Biophys. Acta* 1032:119-136.
184. Levine, A.J. 1990. The p53 protein and its interactions with the oncogene products of the small DNA tumor viruses. *Virology* 177:419-426.
185. Levine, A.J. 1990. The p53 tumor suppressor gene and gene product. In *Genetic Basis for Carcinogenesis: Tumor Suppressor Genes and Oncogenes*. (eds.) A. Knudson, Jr., et al., Japan Sci. Soc. Press, Tokyo/Taylor & Francis, Ltd., London, pp. 221-230.
186. Labow, M.A., Baim, S.B., Shenk, T. and Levine, A.J. 1990. Conversion of the *lac* repressor into an allosterically regulated transcriptional activator for mammalian cells. *Mol. Cell. Biol.* 10(7):3343-3356.

187. Wilson, J.B., Weinberg, W., Johnson, R., Yuspa, S., and Levine, A.J. 1990. Expression of the BNLF-1 oncogene of Epstein-Barr virus in the skin of transgenic mice induces hyperplasia and the aberrant expression of keratin 6. *Cell* 61:1315-1327.
188. Hinds, P.W., Finlay, C.A., Quartin, R.S., Baker, S.J., Fearon, E.R., Vogelstein, B., and Levine, A.J. 1990. Mutant p53 DNAs from human colorectal carcinomas can cooperate with *ras* in transforming primary rat cells: A comparison of the "hot spot" mutant phenotypes. *Cell, Growth & Differen.* 1:571-580.
189. Scheffner, M., Werness, BA, Huibregtse, JM, Levine, AJ, Howley, PM, 1990. The E6 oncoprotein encoded by human papillomavirus 16 or 18 promotes the degradation of p53. *Cell* 63:1129-1136.
190. Oh, S.-J., Chittenden, T., and Levine, A.J. 1991. The identification of cellular factors that bind specifically to the Epstein-Barr virus origin of DNA replication. *J. Virol.* 65:514-519.
191. Martinez, J., Georgoff, I., Martinez, J., and Levine, A.J. 1991. Cellular localization and cell cycle regulation by a temperature sensitive p53 protein. *Genes & Develop.* 5(2):151-159.
192. Lozano, G., and Levine, A.J. 1991. Tissue-specific expression of p53 in transgenic mice is regulated by intron sequences. *Mol. Carcin.* 4:3-9.
193. Kern, S.E., Kinzler, K.W., Baker, S.J., Nigro, J.M., Rotter, V., Levine, A.J., Friedman, P., Prives, C., and Vogelstein, B. 1991. Mutant p53 proteins bind DNA abnormally *in vitro*. *Oncogene* 6:131-136.
194. Levine, A.J., Momand, J., and Finlay, C.A. 1991. The p53 tumor suppressor gene. *Nature* 351:453-456.
195. Sears, A.E., Hukkanen, V., Labow, M.A., Levine, A.J., and Roizman, B. 1991. Expression of the Herpes Simplex virus 1 a transinducing factor (VP16) does not induce reactivation of latent virus or prevent the establishment of latency in mice. *J. Virol.* 65:2929-2935.
196. Montalvo, E.A., Shi, Y., Shenk, T.E., and Levine, A.J. 1991. Negative regulation of the BZLF1 promoter of Epstein-Barr virus. *J. Virol.* 65:3647-3655.
197. Baim, S.B., Labow, M.A., Levine, A.J., and Shenk, T. 1991. A chimeric mammalian transactivator based on the lac repressor that is regulated by temperature and isopropyl β -D-thiogalactopyranoside. *Proc. Natl. Acad. Sci. USA* 88:5072-5076.
198. Chittenden, T., Frey, A., and Levine, A.J. 1991. Regulated replication of an episomal SV40-origin plasmid in COS7 cells. *J. Virol.* 65:5944-5951.

199. Zambetti, G.P., Quartin, R.S., Martinez, J., Georgoff, I., Momand, J., Dittmer, D., Finlay, C.A., and Levine, A.J. 1991. Regulation of transformation and the cell cycle replication by p53. *Cold Spring Harbor Symp. Quant. Biol.* 56:219-225.
200. Shaulsky, G., Goldfinger, N., Tosky, M.S., Levine, A.J., and Rotter, V. 1991. Nuclear localization is essential for the activity of p53 protein. *Oncogene* 6:2055-2065.
201. Harvey, D., and Levine, A.J. 1991. p53 alteration is a common event in the spontaneous immortalization of primary Balb/c murine embryo fibroblasts. *Genes & Develop.* 5:2375-2385.
202. Levine, A.J., Quartin, R.S., Martinez, J., Momand, J., Dittmer, D., Moore, M., and Finlay, C.A. 1991. The p53 tumor suppressor gene. Yakult Symposium, Tokyo, Japan, May 1991, pp. 65-72.
203. Quartin, R.S., Finlay, C.A., Hinds, P.W., Baker, S.J., Fearon, E.R., Vogelstein, B., and Levine, A.J. 1991. Mutant p53 DNA clones from human colon carcinomas cooperate with *ras* to transform primary rat cells. In *Origins of Human Cancer: A Comprehensive Review*, Cold Spring Harbor Press, Cold Spring Harbor, NY, pp. 609-615.
204. Finlay, C.A. and Levine, A.J. 1991. The role of mutations in the p53 tumor suppressor gene. *Molecules and Cells* 1:253-255.
205. Howley, P.M., Levine, A.J., Li, F.P., Livingston, D.M., and Rabson, A.S. 1991. Lack of SV40 DNA in tumors from scientists working with SV40 virus. Letter to the Editor, *N.E.J. Med.* 324:454.
206. Levine, A.J. 1992. *Viruses*, Scientific American Library, W.H. Freeman & Co., New York, New York.
207. Moore, M., Teresky, A.K., Levine, A.J., and Seiberg, M. 1992. p53 mutations are not selected for in SV40 T-antigen induced tumors from transgenic mice. *J. Virol.* 66:641-649.
208. Levine, A.J. 1992. Introduction. In *Cancer Surveys*, Vol. 12: Tumour Suppressor Genes, the Cell Cycle and Cancer. (ed.) A.J. Levine, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, pp. 1-4.
209. Levine, A.J. 1992. The p53 tumour suppressor gene and gene product. In *Cancer Surveys*, Vol. 12: Tumour Suppressor Genes, the Cell Cycle and Cancer. (ed.) A.J. Levine, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, pp. 59-79.
210. Zambetti, G.P., Labow, M., and Levine, A.J. 1992. A mutant p53 protein is required for the maintenance of the transformed cell phenotype in p53 plus *ras* transformed cells. *Proc. Natl. Acad. Sci. USA*, 89:3952-3956.
211. Quartin, R.S., Finlay, C.A., and Levine, A.J. 1992. The p53 gene and gene product. In *Nuclear Processes and Oncogenes*, Bristol-Myers Squibb Cancer Symposia Vol. 14. (ed.) P.A. Sharp, Academic Press, Inc., San Diego, California, pp. 87-104.

212. Lustig, A., and A.J. Levine. 1992. One hundred years of virology. *J. Virol.* 66:4629-4631.
213. Zambetti, G.P., Bargonetti, J., Walker, K., Prives, C., and Levine, A.J. 1992. Wild-type p53 mediates positive regulation of gene expression through a specific DNA sequence element. *Genes & Develop.* 6:1143-1152.
214. Levine, A.J. 1992. The p53 tumor suppressor gene. Editorial in *N.E.J. Med.* 326:1350-1352.
215. Quartin, R., Moore, M., Seiberg, M., Finlay, C., Chu, S., Martinez, J., Dittmer, D., Momand, J., and Levine, A.J. 1992. The p53 gene and protein and its interactions with viral oncogene products. In *Tumor Suppressor Genes*, (ed.) Livingston, D.M. and Mihich, E. Pezcoller Symposium, Trento, Italy, June 1991, John Libbey Publishers, Rome, Italy, pp 181-191.
216. Quartin, R.S., and Levine, A.J. 1992. A comparison of the properties of human p53 mutant alleles. NCI Workshop: Underlying Molecular, Cellular and Immunological Factors in Age-Related Cancers. 1990, Plenum Publishing, New York.
217. Momand, J., Zambetti, G.P., Olson, D.C., George, D., and Levine, A.J. 1992. The mdm-2 oncogene product forms a complex with the p53 protein and inhibits p53 mediated transactivation. *Cell* 69:1237-1245.
218. Moll, U.M., Riou, G., and Levine, A.J. 1992. Two distinct mechanisms alter p53 in breast cancer: Mutation and nuclear exclusion. *Proc. Natl. Acad. Sci. USA* 89:7262-7266.
219. Tevethia, S.S., Epler, M., Georgoff, I., Teresky, A., Marlow, M., and Levine, A.J. 1992. Antibody response to human papovavirus JC (JCV) and Simian Virus 40 (SV40) T antigens in SV40 T antigen transgenic mice. *Virology* 190:459-464.
220. Levine, A.J. 1992. The role of p53 as a tumor suppressor in human cancers. *Adv. Oncology* 8:2-9.
221. Seto, E., Usheva, A., Zambetti, G.P., Momand, J., Horikoshi, N., Weinmann, R., Levine, A.J., and Shenk, T. 1992. Wild-type p53 binds to the TATA-binding protein and represses transcription. *Proc. Natl. Acad. Sci. USA* 89:12028-12032.
222. Perry, M.E., and Levine, A.J. 1993. p53 and the cell cycle. *Curr. Opin. Gen. Dev.* 3:50-54.
223. Levine, A.J., and Burger, M.M. 1993. UICC Study Group on Basic and Clinical Cancer Research: Genotypes and Phenotypes of Tumor Suppressor. *Int. J.Cancer* 53:883-885.
224. Levine, A.J. 1993. The tumor suppressor genes. *Ann. Rev. Biochem.* 62:623-651.
225. Wilson, J.B., and Levine, A.J. 1993. Transgenic mouse model of X-linked cleft palate. *Cell Growth & Differ.* 4:67-76.

226. Perry, M.E., and Levine, A.J. 1993. The cell cycle. In *Molecular Genetics of Nervous System Tumors*, Chapter 6. (eds.) A.J. Levine and H.H. Schmidek, John Wiley & Sons, NY, pp. 83-88.
227. Levine, A.J. 1993. Tumor suppressor genes. In *Molecular Genetics of Nervous System Tumors*, Chapter 10. (eds.) A.J. Levine and H.H. Schmidek, John Wiley & Sons, NY, pp. 137-143.
228. Levine, A.J. 1993. The oncogenes of the DNA tumor viruses. In *Molecular Genetics of Nervous System Tumors*, Chapter 11. (eds.) A.J. Levine and H.H. Schmidek, John Wiley & Sons, NY, pp. 145-151.
229. Quartin, R.S., and Levine, A.J. 1993. The functions of the p53 gene and gene product. The Third International Symposium on Viral Hepatitis and Hepatocellular Carcinoma, Taiwan, December 1991. *J. Gastro. Hepat.* 8:5-11.
230. Dittmer, D., Pati, S., Zambetti, G., Chu, S., Teresky, A.K., Moore, M., Finlay, C., and Levine, A.J. 1993. p53 gain of function mutations. *Nature Gen.* 4:42-46.
231. Almon, E., Goldfinger, N., Kapon, A., Schwartz, D., Levine, A.J., and Rotter, V. 1993. Testicular tissue-specific expression of the p53 suppressor gene. *Develop. Biol.* 156:107-116.
232. Levine, A.J. 1993. The p53 tumor suppressor gene and product. *Biol. Chem. Hoppe-Seyler* 374:227-235.
233. Chen, J., Marechal, V., and Levine, A.J. 1993. Mapping of the p53 and mdm-2 interaction domains. *Mol. Cell. Biol.* 13:4107-4114.
234. Wu, X.W., Bayle, H.J., Olson, D., and Levine, A.J. 1993. The p53-mdm-2 autoregulatory feedback loop. *Genes & Develop.* 7:1126-1132.
235. Olson, D., Marechal, V., Momand, J., Chen, J., Romocki, C., and Levine, A.J. 1993. Identification and characterization of multiple mdm-2 proteins and mdm-2-p53 protein complexes. *Oncogene* 8:2353-2360.
236. Zambetti, G.P., and Levine, A.J. 1993. A comparison of the biological activities of wild-type and mutant p53. *FASEB J.* 7:855-865.
237. Rotter, V., Schwartz, D., Almon, E., Goldfinger, N., Kapon, A., Meshorer, A., Donehower, L.A., and Levine, A.J. 1993. Mice with reduced levels of p53 protein exhibit the testicular giant-cell degenerative syndrome. *Proc. Natl. Acad. Sci. USA* 90:9075-9079.
238. Riou, G., Lê, M.G., Travagli, J.P., Levine, A.J., and Moll, U.M. 1993. Poor prognosis of p53 nuclear overexpression and mutation in inflammatory breast carcinoma. *J. Natl. Can. Inst.* 85:1765-1767.
239. Wilson, J.B., and Levine, A.J. 1993. The oncogenic potential of Epstein-Barr virus nuclear antigen 1 in transgenic mice. *Curr. Top. Microb. Immun.* 182:375-384.

240. Perry, M.E., Piette, J., Zawadzki, J., Harvey, D., and Levine, A.J. 1993. The mdm-2 gene is induced in response to UV light in a p53-dependent manner. *Proc. Natl. Acad. Sci. USA* 90:11623-11627.
241. Olson, D.C., and Levine, A.J. 1994. The properties of p53 proteins selected for the loss of suppression of transformation. *Cell Growth & Differen.* 5:61-71.
242. Levine, A.J. 1994. The road to the discovery of the p53 protein. The Steiner Award Lecture, 1993. *Int. J. Cancer* 56:775-776.
243. Cordon-Cardo, C., Latres, E., Drobnjak, M., Oliva, M.R., Pollack, D., Woodruff, J.M., Brennan, M.F., Marechal, V., Chen, J., and Levine, A.J. 1994. Molecular abnormalities of mdm-2 and p53 genes in adult soft tissue sarcomas. *Cancer Res.* 54:794-799.
244. Quartin, R.S., Cole, C.N., Pipas, J.M., and Levine, A.J. 1994. The amino terminal functions of the SV40 large T-antigen are required to overcome wild-type p53 mediated growth arrest of cells. *J. Virol.* 68:1334-1341.
245. Levine, A.J., Perry, M.E., Chang, A., Silver, A., Dittmer, D., Wu, M., and Welsh, D. 1994. The role of the p53 tumor suppressor gene in tumorigenesis. *Br. J. Cancer* 69:409-416.
246. Wu, X., and Levine, A.J. 1994. p53 and E2F-1 cooperate to mediate apoptosis. *Proc. Natl. Acad. Sci. USA* 91:3602-3606.
247. Quartin, R.S., and Levine, A.J. 1994. The two amino terminal transforming functions of the SV40 large T-antigen are required to overcome p53 mediated growth arrest. In *The Cell Cycle: Regulators, Targets and Clinical Applications.* (ed.) V.W. Hu, Plenum Press, New York, pp. 311-317.
248. Lin, J., Chen, J., Elenbaas, B., and Levine, A.J. 1994. Several hydrophobic amino acids in the p53 amino-terminal domain are required for transcriptional activation, binding to mdm-2 and the adenovirus 5 E1B 55-kD protein. *Genes & Develop.* 8:1235-1246.
249. Levine, A.J., Chang, A., Dittmer, D., Notterman, D.A., Silver, A., Thorn, K., Welsh, D., and Wu, M. 1994. The p53 tumor suppressor gene. *J. Lab. Clin. Med.* 123:817-823.
250. Perry, M.E., and Levine, A.J. 1994. p53 and mdm-2: interactions between tumor suppressor gene and oncogene products. *Mt. Sinai J. Med.* 61(4):291-299.
251. Levine, A.J. 1994. The origins of the small DNA tumor viruses. *Adv. Cancer Res.* 65:141-168.
252. Levine, A.J. 1994. Tumor suppressor genes. *Sci. Med.* 2(1):28-37
253. Marechal, V., Elenbaas, B., Piette, J., Nicolas, J.-C., and Levine, A.J. 1994. The ribosomal L5 protein is associated with mdm-2 and mdm-2-p53 complexes. *Mol. Cell. Biol.* 14(11):7414-7420.

254. Wu, L., Bayle, J.H., Elenbaas, B., Pavletich, N.P., and Levine, A.J. 1995. Alternatively spliced forms of the p53 protein, in the carboxy-terminal domain, regulates its ability to catalyze the annealing of complementary single strands of nucleic acids. *Mol. Cell. Biol.*, 15:497-504.
255. Horikoshi, M., Usheva, A., Chen, J., Levine, A.J., Weinmann, R., and Shenk, T. 1995. Two domains on p53 interact with the TATA-binding protein and the adenovirus 13S E1A protein disrupts the association, relieving p53-mediated transcriptional repression. *Mol. Cell. Biol.*, 15:227-234.
256. Lin, J., Wu, X., Chen, J., Chang, A., and Levine, A.J. 1995. The functions of the p53 protein in growth regulation and tumor suppression. Cold Spr. Hbr. Symp. Quan. Biol., Molecular Genetics of Cancer, vol 59, pp. 215-223.
257. Levine, A.J. 1995. Tumor Suppressor Genes. In Mendelsohn, et al (eds): The Molecular Basis of Cancer. W.B. Saunders Company, Philadelphia, PA, pp. 86-104.
258. Levine, A.J. 1995. The Genetic Origins of Neoplasia. *JAMA*, 273(7):592.
259. Chen, J., Lin, J. and Levine, A.J. 1995 The Regulation of p53-Mediated Transcription Functions by mdm-2. *Mol. Med.*, 1:142-152.
260. Levine, A.J. and Broach, J.R., eds. *Oncogenes and cell proliferation*. Current Opinion in Genetics and Development, ed. R. Laskey and M.P. Scott. Vol. 5, 1995, Current Biology, Ltd: Philadelphia, PA.
261. Levine, A.J. and Broach, J.R. 1995. Oncogenes and cell proliferation, Editorial Overview. *Current Opinion in Genetics and Development*. 5:1-4.
262. Riou, G., Barrois, M. Prost, S., Terrier, M.J., Theodore, C., and Levine, A.J. 1995. The p53 and mdm-2 genes from human testicular germ cell tumors. *Mol. Carcinogen.*, 12:124-131.
263. Levine, A.J. 1995. The p53 tumour suppressor gene. *Helix*, 4:18-25.
264. Lee, S., Elenbaas, B., Levine, A.J. and Griffith, J. 1995. P53 and its 14kDa c-terminal domain recognize primary DNA damage in the form of insertion/deletion mismatches. *Cell*, 81:1-20.
265. Lu, H. and Levine, A.J. 1995. Human TAF_{II}31 is a Transcriptional Coactivator of the p53 protein. *Proc. Natl. Acad. Sci., USA*, 92:5154-5158.
266. Bayle, J.H., Elenbaas, B. and Levine, A.J. 1995. The Carboxy-terminal Domain of the p53 Protein Regulates DNA Sequence Specific Binding through its Nonspecific Nucleic Acid Binding Site. *Proc. Natl. Acad. Sci., USA*, 92:5729-5733.

267. Weinberg, W.C., Azzoli, C., Chapman, K., Levine, A.J. and Yuspa, S. 1995. p53-mediated transcriptional activity increases in differentiating epidermal keratinocytes in association with decreased p53 protein. *Oncogene*, 10:2271-2279.
268. Lin, J., Teresky, A. and Levine, A.J. 1995. Two Critical Hydrophobic Amino Acids in the N-Terminal Domain of the p53 Protein Are Required for the Gain of Function Phenotypes of Human p53 Mutants. *Oncogene*, 10:2387-2390.
269. Levine, A.J. 1995. Principles of Cell Regulation. In *Williams Hematology*, 5th Edition, Chapter 13. (eds.) E. Beutler, M.A. Lichtman, B.S. Collier and T.J. Kipps, McGraw-Hill, Inc., New York. pp. 107-113.
270. Xiao, Z.-X., Chen, J., Levine, A.J., Modjtahedi, N., Xing, J., Sellers, W.R. and Livingston, D.M. 1995. Interaction between the retinoblastoma protein and the oncoprotein MDM2. *Nature*, 375:694-698.
271. Grand, R.J.A., Lecane, P.S., Owen, D., Grant, M.L., Roberts, S., Levine, A.J. and Gallimore, P.H. 1995. The high levels of p53 present in adenovirus early region 1-transformed human cells do not cause up-regulation of mdm-2 expression. *Virology*, 210:323-334.
272. Sabbatini, P., Lin, J., Levine, A.J. and White, E. 1995. Essential role for p53-mediated transcription in E1A-induced apoptosis. *Genes & Devel.*, 9:2184-2192.
273. Levine, A.J., Wu, M.C., Chang, A., Silver, A., Attiyeh, E.F., Lin, J. and Epstein, C. 1995. The Spectrum of Mutation at the p53 Locus: Evidence for tissue-specific mutagenesis, selection of mutant alleles and a "Gain of Function" phenotype. *Annals of the New York Academy of Sciences, Cancer Prev.* 768:111-128.
274. Theobald, M., Biggs, J., Dittmer, D., Levine, A.J. and Sherman, L.A. 1995. Targeting p53 as a general tumor antigen. *Proc. Natl. Acad. Sci., USA.* 92:11993-11997.
275. Del Sal, G., Ruaro, E.M., Utrera, R., Cole, C.N., Levine, A.J. and Schneider, C. 1995. Gas1-Induced Growth Suppression Requires a Transactivation-Independent p53 Function. *Mol Cell Biol*, 15:7152-7160.
276. Levine, A.J. 1996. The Origins of Virology. In: Fields, et al (eds): *Fields Virology* 3 ed. Vol. 2, Chapter 1. Lippincott-Raven Publishers, Philadelphia, PA, pp. 1-14.
277. Strauss, E.G., Strauss, J.H. and Levine, A.J. 1996. Virus Evolution. In: Fields, et al (eds): *Fields Virology* 3 ed. Vol. 2, Chapter 6. Lippincott-Raven Publishers, Philadelphia, PA, pp. 153-172.
278. Del Sal, G., Murphy, M., Ruaro, E.M., Lazarevic, D., Levine, A.J. and Schneider, C. 1996. Cyclin D1 and p21/waf1 are both involved in p53 growth suppression. *Oncogene*, 12:177-185.

279. Lin, J., Reichner, C., Wu, X. and Levine, A.J. 1996. The analysis of wild-type and mutant p21^{WAF-1} gene activities. *Mol. Cell. Biol.*, 16:1786-1793.
280. Chen, J., Wu, X., Lin, J. and Levine, A.J. 1996. Mdm-2 inhibits the G1 arrest and apoptosis functions of the p53 tumor suppressor protein. *Mol. Cell. Biol.*, 16:2445-2452.
281. Roth, J., Dittmer, D., Rea, D., Tartaglia, J., Paoletti, E. and Levine, A.J. 1996. p53 as a target for cancer vaccines: Recombinant canarypos virus vectors expressing p53 protect mice against lethal tumor cell damage. *Proc. Natl. Acad. Sci. USA*, 93:4781-4786.
282. Lutzker, S. and Levine, A.J. 1996. A functionally inactive p53 protein in embryonal teratocarcinoma cells is activated by DNA damage or cellular differentiation. *Nat. Med.*, 2:804-810.
283. Wilson, J.B., Bell, J.L. and Levine, A.J. 1996. Expression of Epstein-Barr virus nuclear antigen-1 induces B cell neoplasia in transgenic mice. *EMBO J.*, 15:3117-3126.
284. Elenbaas, B., Dobbelstein, M., Roth, J., Shenk, T. and Levine, A.J. 1996. The MDM2 oncoprotein binds specifically to RNA through its RING finger domain. *Mol. Med.*, 2:439-451.
285. Lu, H., Lin, J., Chen, J. and Levine, A.J. 1996. The regulation of p53-mediated transcription and the roles of hTAF_{II}31 and mdm-2. *The Harvey Lectures*, 90:81-93.
286. Lutzker, S., and Levine, A. J. 1996. Apoptosis and cancer chemotherapy. In W. N. Hait (ed.), Drug Resistance. Kluwer Academic Publishers, Norwell, MA, pp. 345-356.
287. Kussie, P.H., Gorina, S., Marechal, V., Elenbaas, B., Moreau, J., Levine, A.J. and Pavletich, N.P. 1996. Structure of MDM2 oncoprotein bound to the p53 tumor suppressor transactivation domain. *Science*, 274:948-953.
288. Murphy, M., Hinman, A. and Levine, A.J. 1996. Wild-type p53 negatively regulates the expression of a microtubule-associated protein. *Genes & Devel.*, 10:2971-2980.
289. Walker, K.K. and Levine, A.J. 1996. Identification of a novel p53 functional domain which is necessary for efficient growth suppression. *Proc. Natl. Acad. Sci., USA*, 93:15335-15340.
290. Levine, A.J. 1997. p53, the cellular gatekeeper for growth and division. *Cell*, 88:323-331.
291. Hayashi, S., Rubinfeld, B., Souza, B., Polikis, P., Wieschaus, E. and Levine, A.J. 1997. The *Drosophila* homolog of the tumor suppressor gene adenomatous polyposis coli (APC) down-regulates β -catenin but its zygotic expression is not essential for the regulation of Armadillo. *Proc. Natl. Acad. Sci., USA*, 94:242-247.

292. Levine, A.J. and Broach, J.R., eds. *Oncogenes and cell proliferation*. Current Opinion in Genetics and Development, ed. R. Laskey and M.P. Scott. Vol. 7, 1997, Current Biology, Ltd: Philadelphia, PA.
293. Broach, J.R. and Levine, A.J. 1997. Oncogenes and cell proliferation, Editorial Overview. *Current Opinion in Genetics and Development*. 7:1-6.
294. Marechal, V., Elenbaas, B., Taneyhill, L., Piette, J., Mechali, M., Nicolas, J-C., Levine, A.J. and Moreau, J. 1997. Conservation of structural domains and biochemical activities of the MDM2 protein from *Xenopus laevis*. *Oncogene*, 14:1427-1433.
295. Freedman, D.A., Epstein, C.B., Roth, J.C. and Levine, A.J. 1997. A genetic approach to mapping the p53 binding site in the MDM2 protein. *Mol. Med.*, 3:248-259.
296. Ruaro, E.M., Collavin, L., Del Sal, G., Haffner, R., Oren, M., Levine, A.J. and Schneider, C. 1997. A proline-rich motif in p53 is required for transactivation-independent growth arrest as induced by Gas1. *Proc. Natl. Acad. Sci. USA*, 94:4675-4680. PMCID: PM20783
297. Bullions, L.C., Notterman, D.A., Chung, L.S. and Levine, A.J. 1997. Expression of the wild-type α -catenin gene restores both growth regulation and tumor suppression activities. *Mol. Cell. Biol.*, 17:4501-4508.
298. Dobbelstein, M., Roth, J., Kimberly, W. T., Levine, A. J., Shenk, T. 1997. Nuclear export of the E1B 55-kDa and E4 34-kDa adenoviral oncoproteins mediated by a rev-like signal sequence. *The EMBO J.*, 16:4276-4284.
299. Wu, L., and Levine, A.J. 1997. Differential regulation of the p21/WAF-1 and mdm2 genes after high-dose UV irradiation: p53-dependent and p53-independent regulation of the mdm2 gene. *Mol. Med.*, 3:441-451.
300. Uesugi, M., Nyanguile, O., Lu, H., Levine, A.J., and Verdine, G.L. 1997. Induced alpha helix in the VP16 activation domain upon binding to a human TAF. *Science*, 277: 1310-1313.
301. Lu, H., Fisher, R.P., Bailey, P., and Levine, A.J. 1997. The CDK7cycH-p36 complex of transcription factor IIH phosphorylates p53, enhancing its sequence-specific DNA binding activity in vitro. *Mol. Cell. Biol.*, 17(10):5923-5934.
302. Chen, L., Marechal, V., Moreau, J., Levine, A.J., and Chen, Jiandong. 1997. Proteolytic cleavage of the mdm2 oncoprotein during apoptosis. *J. Biol. Chem.*, 272(36):22966-22973.
303. Roth, J., Dobbelstein, M., Freedman, D. A., Shenk, T., and Levine, A.J. 1998. Nucleo-cytoplasmic shuttling of the hdm2 oncoprotein regulates the levels of the p53 protein via a pathway used by the human immunodeficiency virus rev protein. *EMBO J.* 17(2): 554-564.

304. Bullions, L.C. and Levine, A.J. 1998. The role of beta-catenin in cell adhesion, signal transduction, and cancer. *Current Opinion in Oncology* 10: 81-87.
305. Zhang, C.C., Yang, J.M., White, E., Murphy, M., Levine, A.J., and Hait, W.N. 1998. The role of MAP4 expression in the sensitivity to paclitaxel and resistance to vinca alkaloids in p53 mutant cells. *Oncogene* 16:1617-1624.
306. Lu, H. Taya, Y., Ikeda, M., and Levine, A.J. 1998. Ultraviolet Radiation, but not γ radiation or etoposide-induced DNA damage, results in the phosphorylation of the murine p53 protein at serine-389. *Proc. Natl. Acad. Sci. USA*, 95: 6399-6402.
307. Epstein, C.B., Attiyeh, E.F., Hobson, D.A., Silver, A.L., Broach, J.R., and Levine, A.J. 1998. P53 mutations isolated in yeast based on loss of transcription factor activity: similarities and differences from p53 mutations detected in human tumors. *Oncogene*, 16: 2115-2122.
308. Zeng, X., Levine, A.J., and Lu, H. 1998. Non-p53 p53RE binding protein, a human transcription factor functionally analogous to P53. *Proc. Natl. Acad. Sci. USA*, 95: 6681-6686.
309. Ahmed, Y., Hayashi, S., Levine, A., and Wieschaus 1998. Regulation of Armadillo by a Drosophila APC Inhibits Neuronal Apoptosis during Retinal Development. *Cell*, 93: 1171-1182.
310. Muller, A.J., Chatterjee, S., Teresky, A., Levine, A.J. 1998. The gas5 gene is disrupted by a frameshift mutation within its longest open reading frame in several inbred mouse strains and maps to murine Chromosome 1. *Mammalian Genome*, 9:773-774.
311. Freedman, D.A. and Levine, A.J. 1998. Nuclear Export Is Required of Endogenous p53 by MDM2 and Human Papillomavirus E6. *Molecular and Cellular Biology*, 12:7288-7293.
312. Notterman, D., Young, S., Wainger, B., Levine A.J. 1998. Prevention of mammalian DNA reduplication, following the release from the mitotic spindle checkpoint, requires p53 protein, but not p53-mediated transcriptional activity. *Oncogene*, 17: 2743-2751.
313. Pennica, D., Swanson, T.A., Welsh, J.W., Roy, M.A., Lawrence, D.A., Lee, J., Brush, J., Taneyhill, L.A., Deuel, B., Lew, M., Watanabe, C., Cohen, R.L., Melhem, M.F., Finley, G. G., Quirke, P., Goddard, A.D., Hillan, K.J., Gurney, A.L., Botstein, D., and Levine, A.J. 1998. *WISP* genes are members of the connective tissue growth factor family that are up-regulated in Wnt-1 transformed cells and aberrantly expressed in human colon tumors. *Proc. Natl. Acad. Sci. USA*, 95: 14717-14722.
314. Freedman, D.A. and Levine, A.J. 1998. Nuclear Export is Required for Degradation of Endogenous p53 by MDM2 and Human Papillomavirus E6. *Molecular and Cellular Biology*, 18: 7288-7293.
315. Murphy, M. and A.J. Levine 1998. The role of p53 in apoptosis. In *Apoptosis Genes*, (eds.) J.W. Wilson, C. Booth, C.S. Potten, Kluwer Academic Publishers, Boston, pp.5-36.

316. Mack, D.H., Tom, E.Y., Mahadev, M., Dong, H., Mittmann, M., Dee, S., Levine, A.J., Gingeras, T.R. and Lockhart, D.J. 1998. Deciphering Molecular Circuitry Using High-Density DNA Arrays. In *The Biology of Tumors*, (ed.) Mihich and Croce, Plenum Press, pp. 85-108.
317. Blandino, G., Levine, A.J. and Oren, M. 1999. Mutant p53 gain of function: differential effects of different p53 mutants on resistance of cultured cells to chemotherapy. *Oncogene*, 18: 477-485.
318. Tao, W. and Levine, A.J. 1999. Nucleocytoplasmic shuttling of oncoprotein Hdm2 is required for Hdm2-mediated degradation of p53. *Proc. Natl. Acad. Sci. USA*, 96: 3077-3080. PMCID:15897
319. Freedman, D.A., Wu, L. and Levine, A.J. 1999. Functions of the MDM2 oncoprotein. *Cell. Mol. Life Sci.*, 55: 96-107.
320. Tao, W. and Levine, A.J. 1999. P19^{ARF} stabilizes p53 blocking nucleo-cytoplasmic shuttling of Mdm2. *Proc. Natl. Acad. Sci. USA*, 96: 6937-6941.
321. Alon, U., Barka, N., Notterman, D.A., Gish, K., Ybarra, S., Mack, D. and Levine, A.J. 1999. Broad patterns of gene expression revealed by clustering analysis of tumor and normal colon tissues probed by oligonucleotide arrays. *Proc. Natl. Acad. Sci. USA*, 96: 6745-6750.
322. Schell, T.D., Mylin, L.M., Georgoff, I., Teresky, A.K., Levine, A.J. and Tevethia, S.S. 1999. Cytotoxic T-Lymphocyte Epitope Immunodominance in the Control of Choroid Plexus Tumors in Simian Virus 40 Large T Antigen Transgenic Mice. *Journal of Virology*, 73: 5981-5993. PMCID: PMC112659
323. Freedman, D.A. and Levine, A.J. 1999. Regulation of the p53 Protein by the MDM2 Oncoprotein – Thirty-eighth G.H.A. Clowes Memorial Award Lecture. *Cancer Research*, 59: 1-7.
324. Zhang, C.C, Yang, J, Bash-Babula, J, White, E, Murphy, M, Levine, A.J and Hait, W. 1999. DNA Damage Increases Sensitivity to Vinca Alkaloids and Decreases Sensitivity to Taxanes through p53-dependent Repression of Microtubule-associated Protein 4¹. *Cancer Research* 59: 3663-3670.
325. Muller, A.J., Heiden, K.B., Teresky, A.K. and Levine, A.J. 1999. Genetic mapping of the embryonal carcinoma transplantation resistance locus Gt(B6) to mouse Chromosome 8. *Immunogenetics* 49:949-956.
326. Casau, A.E., Vaughn, J.E., Lozano, G. and Levine, A.J. 1999. Germ Cell Expression of an Isolated Human Endogenous Retroviral Long Terminal Repeat of the HERV-K/HTDV Family in Transgenic Mice. *Journal of Virology*, 73: 9976-9983. PMCID: PMC113048

327. Murphy, M., Ahn, J., Walker, K.E., Hoffman, W.H., Evans, R. M., Levine, A.J., and George, D.L. 1999. Transcriptional repression by wild-type p53 utilizes histone deacetylases, mediated by interaction with mSin3a. *Genes and Development*, 13:2490-2501
328. Ahn, J., Murphy, M., Kratowicz, S., Wang, A., Levine, A.J., and, George, D.L. 1999. Down-regulation of the stathmin/Op18 and FKBP25 genes following p53 induction. *Oncogene*, 18, 5954-5958
329. Xu, L., Corcoran, R., Welsh, J.W., Pennica, D., Levine, A.J. 2000. *WISP-1* is a Wnt-1- and B-catenin-responsive oncogene. *Genes & Development* 14:585-595
330. Muller, A.J., Teresky, A.K. and Levine, A.J. 2000. A male germ cell tumor susceptibility Determining locus, pgct1, identified on murine chromosome 13. *Proc. Natl. Acad. Sci.* 97:8421-8426
331. Jin, S., Martinek, S., Joo, W., Mirkovic, N., Sali, A., Pavletich, N.P., Young, M.W. and Levine, A.J. 2000. Identification and Characterization of a p53 Homologue in *Drosophila Melanogaster*. *Proc. Natl. Acad. Sci.* 97:7301-7306.
332. Zhao, R., Gish, K., Murphy, M., Yin, Y., Notterman, D., Hoffman, W.H., Tom, E., Mack, D.H. and Levine, A.J. 2000. Analysis of p53-regulated gene expression patterns using oligonucleotide arrays. *Genes & Development* 14:981-993.
333. Bar-Or, R.L., Maya, R., Segel, L.A., Alon, U., Levine, A.J. and Oren, M. 2000. Generation of oscillations by the p53-Mdm2 feedback loop: A theoretical and experimental study. 2000. *Proc. Natl. Acad. Sci.* 97:11250-11255
334. Strano, S., Munarriz, E., Rossi, M., Cristofanelli, B., Shaul, Y., Castagnoli, L., Levine, A. J., Sacchi, A., Cesareni, G., Oren and Blandino, G. 2000. Physical and Functional Interaction between p53 Mutants and Different Isoforms of p73. *Journal of Biological Chemistry* 275: 29503-29512.
335. Vogelstein, B., Lane, D. and Levine, A.J. 2000. Surfing the p53 network. *Nature* 408: 307-310.
336. Zhao, R., Gish, K., Murphy, M., Yin, Y., Notterman, D., Hoffman, W.H., Tom, E., Mack, D.H., and Levine, A.J. 2000. The Transcriptional Program following p53 Activation. *Cold Spring Harbor Symposia on Quantitative Biology*, LXV:475-482.
337. Li, L., Darden, T.A., Weinberg, C.R., Levine, A.J. and Pedersen, L.G. 2000. Gene Assessment and Sample Classification for Gene Expression Data Using a Genetic Algorithm/K-nearest Neighbor Method. *Combinatorial Chemistry and High Throughput Screening*.
338. Ziemer, L.T., Pennica, D. and Levine, A.J. 2001. Identification of a Mouse Homolog of the Human BTEB2 Transcription Factor as a B-Catenin-Independent Wnt-1-Responsive Gene. *Molecular and Cellular Biology*, 21:562-574. PMID:PM86620

339. Notterman, D.A., Shawber, C.J. and Levine, A.J. 2002. Tumor Biology and Microarray Analysis of Solid Tumors: Colorectal Cancer as a Model System. *Microarrays and Cancer Research*, 81-111.
340. Pipas, J.M. and Levine, A.J. 2001. Role of T antigen interactions with p53 in tumorigenesis. *Seminars in Cancer Biology*, 2:23-30.
341. Notterman, D.A., Alon, U., Sierk, A.J. and Levine, A.J. 2001. Transcriptional Gene Expression Profiles of Colorectal Adenoma, Adenocarcinoma, and Normal Tissue Examined by Oligonucleotide Arrays. *Cancer Research*, 61:3124-3130.
342. Knipe, D.M., Howley, P.M., Levine, A.J., et al. 2001. Fields Virology. *Lippincott Williams & Wilkins*, Fourth Edition: Volume 1&2.
343. Knipe, D.M., Howley, P.M., Levine, A.J., et al. 2001. Fundamental Virology, *Lippincott Williams & Wilkins*, Fourth Edition
344. Tao, W., Pennica, D., Xu, L., Kalejta, R.F., and Levine, A.J. 2001. Wrch-1, a novel member of the Rho gene family that is regulated by Wnt-1. *Genes & Development*, 15:1796-1807.
345. Mendelsohn, J., Howley, P.M., Israel, M., Liotta, L.A., Levine, A.J., et al. 2001. The Molecular Basis of Cancer. *W.B. Saunders Company*, Second Edition
346. Levine, A.J. 2001. Classic Experiment – p53 is a Tumor Suppressor Gene. Website <http://www.ergito.com/servlet/Lookup?expt=levine>.
347. Venter, J.C., Levine, A.J., Zhu, Xiaohong. 2001. The Sequence of the Human Genome. *Science*, 291:1304-1351.
348. Levine, A.J. 2001. Cancer research in the 21st Century. *Keio Journal of Medicine*, Vol. 50 No. 3.
349. Jin, S. and Levine A.J., 2001. The p53 Functional Circuit. *J. Cell Sci.* 114:4139-4140.
350. Berger, M., Vogt Sinov, R., Levine, A.J. and Haupt, Y. 2001. A Role for Polyproline Domain of p53 in Its Regulation by Mdm2. *J. Biol. Chem*, 276: 3785-3790.
351. Su, F., Overholtzer, M., Besser, D. Levine, A.J. 2002. WISP-1 attenuates p53-Mediated apoptosis in response to DNA damage through activation of the Akt Kinase. *Genes and Development*, 16:46-57.PMCID: PMC155313
352. Elowitz, M.B., Levine, A.J., Siggia, E.D., Swain, P.S. 2002. Stochastic Gene Expression in a Single Cell. *Science*, 297:1183-1186.
353. Pugacheva, E.N. Ivanov, A.V., Kravchevenko, J.E., Kopnin, B.P., Levine, A.J., Chernakov, P.M. 2002. Novel Gain of Function Activity of p53 Mutants: Activation of the dUTPase Gene Expression Leading to Resistance to 5-fluorouracil. *Oncogene*, 21: 4595-4600.

354. Hoh, J. Jin, S., Parrado, T., Edington, J., Levine, A.J., Ott, J., 2002, The p53 MH Algorithm and its Application in Detecting p53 Responsive Genes. *Proceedings Nat. Acad. Sci., USA*, 99: 8467-8472.
355. Singh, B., Reddy, P.G., Goberdhan, A., Walsh, C., Dao, S., Nagai, I., Chou, J.C., O'Chavenat, C., Levine, A.J., Rao, P.H., Stouffel, A., 2002, P53 Regulates Cell Survival by Inhibiting PIK3CA in Squamous Cell Carcinomas, *Genes and Develop.* 16: 984-993.
356. Levine, A.J., 2002, The Origins of Cancer and the Human Genome, *The Genomic Revolution Unveiling the Unity of Life*, (ed.) M. Yudell and R. DeSalle, Joseph Henry Press, 87-96.
357. Jin, S., Kalkum, M., Overholtzer, M., Stoffel, A., Chait, B.T., and Levine, A.J., 2003. CIAP1 and the serine protease HTRA2 are involved in a novel p53-dependent apoptosis pathway in mammals. *Genes and Development*, 17:359-367. PMCID: PMC195984
358. Overholtzer, M., Rao, P.H., Favis, R., Lu, X.Y., Elowitz, M.B., Barany, F., Ladanyi, M., Gorlick, R. and Levine, A.J., 2003. The presence of p53 mutations in human osteosarcomas correlates with high levels of genomic instability. *PNAS*, 100: 11547-52; published online before print as 10.1073/pnas.1934852100.
359. Yue, Z., Jin, S., Yang, C., Levine, A.J., and Heintz, N., 2003. Beclin 1, An autophagy gene essential for early embryonic development, is a haploinsufficient tumor suppressor. *PNAS*, 100:15077-15082.
360. Alexe, G., Bhanot, G., Levine, A.J., and Stolovitzky, G., 2003. Robust Diagnosis of Non-Hodgkin Lymphomas Using Gene Expression Data from Different Laboratories. *Bioinformatics.*, 1:1-9.
361. Lahav, G., Rosenfeld, N., Sigal, A., Geva-Zatorsky, N., Levine, A.J., Elowitz, M.B., and Alon, U., 2004. Dynamics of the p53-Mdm2 feedback loop in individual cells. *Nature Genetics*, 36:147-150.
362. Levine, A.J., Finlay, C.A. and Hinds, P.W., 2004. P53 is a Tumor Suppressor Gene. *Cell*, S116:67-69.
363. Stoffel, A., Chaurushiya, M., Singh, B., and Levine, A.J., 2004. Activation of NF-kB and inhibition of p53 mediated apoptosis by API2/MALT1 fusions promote oncogenesis. *PNAS*, 101:9079-9084; published online before print as 10.1073/pnas.0402415101.
364. Stoffel, A. and Levine, A.J., 2004. Activation of NF-kB by the AP12/MALT1 fusions inhibits p53 dependant but not FAS induced apoptosis – A directional link between Nk-kB and p53. *Cell Cycle*, 3:1017-1020.
365. Plotkin, J.B., Robins, H. and Levine, A.J. 2004. Tissue-specific Codon Usage and the Expression of Human Genes. *PNAS*, 101:12588-12591.
366. Chen, W.Y., Cooper, T.K., Zahnow, C.A., Overholtzer, M., Zhao, Z., Ladanyi, M., Karp, J.E., Gokgoz, N., Wunder, J.S, Andrulls, I.L., Levine, A.J., and Baylan, S.B., 2004.

Epigenetic and genetic loss of *Hic1* function accentuates the role of *p53* in tumorigenesis. *Cell Cycle*, 6:387-398.

367. Bond, G.L., Hu, W., Bond, E.E., Robins, H., Bartel, F., Taubert, H., Wuer, P., Onel, K., Yip, L., Hwang, S.J., Strong, L.C., Lozano, G. and Levine, A.J., 2004. A Single Nucleotide Polymorphism in the MDM2 Promoter Attenuates the p53 Tumor Suppressor Pathway and Accelerates Tumor Formation in Humans. *Cell*, 119:591-602.
368. Bond, G.L., Hu, W., and Levine, A.J., 2005. MDM2 Is a Central Node in the p53 Pathway: 12 years and Counting. *Current Cancer Drug Targets*, 5:3-8.
369. Robins, H., Alexe, G., Harris, S., and Levine, A.J., 2005. The First Twenty-five Years of p53 Research. In *25 Years of P53 Research*, (eds.) P. Hainaut and K.G. Wiman, Springer Publishing, p. 1-25.
370. Ma, B. Pan, Y., Gunasekaran, K., Venkataraghavan, R.B., Levine, A.J., and Nussinov, R., 2005. Comparison of the Protein-protein Interfaces in the p53-DNA Crystal Structures: Towards Elucidation of the Biological Interface. *PNAS*, 102:3988-3993.
371. Pan, Y., Ma, B., Venkataraghavan, R.B., Levine, A.J. and Nussinov, R., 2005. In the Quest for Stable Rescuing Mutants of p53: Computational Mutagenesis of Flexible Loop L1. *Biochemistry*, 44:1423-1432.
372. Pan, Y., Ma, B., Levine, A.J., and Nussinov, R., 2006. Comparison of the human and worm p53 structures suggests a way for enhancing stability. *Biochemistry*, 45(12):3925-3933.
373. Harris, S.A. and Levine, A.J., 2005. The p53 Pathway: Positive and Negative Feedback Loops. *Oncogene*, 24:2899-2908.
374. Feng, Z., Zhang, H., Levine, A.J. and Jin, S. 2005, The Coordinate Regulation of the p53 and mTOR Pathways in cells. *PNAS*, 102:8204-8209.
375. Levine, A.J., Bargonetti, J., Bond, G.L., Hoh, J., Onel, K., Overholtzer, M., Stoffel, A., Teresky, A.K., Walsh, C.A., and Jin, S., 2005. The p53 Network. In *The p53 Tumor Suppressor*. (ed.) G. Zambetti, Springer Science & Business Media, p. 1-23.
376. Arva, N.C, Gopen, T.R., Talbott, K.E., Campbell, L.E., Chicas, A., White, D.E., Bond, G.L, Levine, A.J., and Bargonetti, J., 2005. A Chromatin-associated and Transcriptionally Inactive p53-Mdm2 Complex Occurs in Mdm2 SNP309 Homozygous Cells. *Jour. Biol. Chem.*, 29:26776-26787.
377. Ma, B., Pan, Y., Gunasekaran, K., Keslin, O., Venkataraghavan, R. B., Levine, A.J., and Nussinov, R., 2005. The Contribution of the Trp/Met/Phe Residues to Physical Interactions of p53 with Cellular Proteins. *Physical Biology*, 2:S56-S66.
378. Bond, G.L., Hu, Wenwei and Levine, A.J., 2005. A Single Nucleotide Polymorphism in the *MDM2* Gene: From a Molecular and Cellular Explanation to Clinical Effect. *Cancer Research*, 65:5481-5484.

379. Ma, L., Wagner, J., Rice, J.J., Hu, W., Levine, A.J., and Stolovitzky, G.A., 2005. A Plausible Model for the Digital Response of p53 to DNA Damage. *PNAS*, 102:14266-14271.
380. Harris, S.L., Gil, G., Robins, H., Hu, W., Hirshfield, K., Bond, E., Bond, G. and Levine, A.J., 2005. Detection of Functional Single Nucleotide Polymorphisms that Affect Apoptosis. *PNAS*, 102:16297-16302. PCMid: PMC1283473
381. Robins, H., Krasnitz, M., Barak, H. and Levine, A.J., 2005. A Relative Entropy Algorithm for Genomic Fingerprinting Captures Host-Phage Similarities; *J. Bacteriol.*, 187 (24): 8370-8374.
382. Alexe, G., Bhanot, G., Venkataraghavan, B., Ramaswamy, R., Lepre, J., Levine, A.J., and Stolovitzky, G., 2005. A Robust Meta-classification Strategy for Cancer Diagnosis from Gene Expression Data; *Proc IEEE Comput Syst Bioinform Conf.*, 322-325.
383. Alexe, G., Bhanot, G., Levine, A.J., and Stolovitzky, G., 2005. Robust diagnosis of non-Hodgkin lymphoma phenotypes validated on gene expression data from different laboratories; *Genome Inform Ser Workshop Genome Inform.*; 16 (1):233-244.
384. Wagner, J., Ma, L., Rice, J.J., Hu, W., Levine, A.J., and Stolovitzky, G.A., 2005. p53-Mdm2 loop controlled by a balance of its feedback strength and effective dampening using ATM and delayed feedback. *Syst Biol (Stevenage)*. 152(3):109-118.
385. Ma, B., Pan, Y., Gunasekaran, K., Keskin, O., Venkataraghavan, R.B., Levine, A.J., and Nussinov, R., 2005. The contribution of the Trp/Met/Phe residues to physical interactions of p53 with cellular proteins. *Phys. Biol.*, 2:S56-S66.
386. Harris, S.L., Gil, G., Hu, W., Robins, H., Bond, E., Hirshfield, K., Feng, Z., Yu, X., Teresky, A.K., Bond, G. and Levine, A.J., 2005. Single Nucleotide Polymorphisms in the p53 Pathway. In *Proc. of the Cold Spring Harbor Symp. on Quantitative Biology: Molecular Approaches to Controlling Cancer*, 70:111-119.
387. Feng, Z., Jin, S., Zupnick, A., Hoh, J., de Stanchina, E., Lowe, S., Prives, C., and Levine, A.J., 2006. p53 tumor suppressor protein regulates the levels of huntingtin gene expression. *Oncogene*, 25(1):1-7.
388. Levine, A.J., Feng, Z., Mak, T.W., You, H. and Jin, S., 2006. Coordination and Communication between the p53 and IGF-1-AKT-TOR Signal Transduction Pathways. *Genes and Development*, 20(3):267-275.
389. Cully, M., You, H., Levine, A.J., Mak, T.W., 2006. Beyond PTEN mutations: the PI3K pathway as an integrator of multiple inputs during tumorigenesis. *Nature Reviews Cancer*, 6(3):184-192.
390. Bhanot, G., Alexe, G., Venkataraghavan, R.B., and Levine, A.J., 2006. A Robust Meta-Classification Strategy for Cancer Detection from Mass Spectrometry Data. *Proteomics*, 6 (2):592-604.

391. Bond, G.L., Hirshfield, K.M., Kirchoff, T., Alexe, G., Bond, E.E., Robins, H., Bartel, F., Taubert, H., Wuerl, P., Hait, W., Toppmeyer, D., Offit, K., and Levine, A.J., 2006. MDM2 SNP309 Accelerates Tumor Formation in a Gender-Specific and Hormone Dependent Manner. *Cancer Res.* 66:5104-5110.
392. Yu, X., Harris, S., and Levine, A.J., 2006, The regulation of exosome secretion: a Novel Function of the p53 Protein. *Cancer Res.*, 66:4795-4801.
393. Levine, A.J., Hu, W., and Feng, Z., 2006. The p53 Pathway: What Questions Remain to be Explored? *Cell Death and Differentiation*, 13:1027-1036.
394. Bond, G.L., Menin, C., Bertorelle, R. Alhorpuro, P., Aaltonen, L.A., and Levine, A.J., 2006. MDM2 SNP309 Accelerates Colorectal Tumour Formation in Women. *J. Med. Genet.*, 43(12):950-952. PMCID: PMC2563203
395. Rabadán, R., Levine, A.J., and Robins, H., 2006. Comparison of avian and human influenza A virus reveals a mutational bias on the viral genomes. *J Virol.*, 80(23):11887-11891.
396. Bond, G.L. and Levine, A.J., 2007. A single nucleotide polymorphism in the p53 pathway interacts with gender, environmental stresses and tumor genetics to influence cancer in humans. *Oncogene*, 26:1317-1323.
397. Atwal, G.S., Bond, G.L., Metsuyanin, S., Papa, M., Friedman, E., Distelman-Menachem, T., Asher, E.B., Lancet, D., Ross, D.A., Sninsky, J., White, T.J., Levine, A.J., and Yarden, R., 2007. Haplotype structure and selection of the MDM2 oncogene in humans. *PNAS*, 104(11):4524-4529.
398. Hu, W., Feng, Z., Ma, L., Wagner, J., Rice, J.J., Stolovitzky, G., and Levine, A.J., 2007. A single nucleotide polymorphism in the MDM2 gene disrupts the oscillation of p53 and MDM2 levels in cells. *Cancer Research*, 67(6):2757-2765.
399. Feng, Z. Hu, W., de Stanchina, E., Teresky, A.K., Jin, S., Lowe, S., and Levine, A.J., 2007. The Regulation of AMPK Beta 1, TSC2, and PTEN Expression by p53: Stress, Cell and Tissue Specificity, and the Role of these Gene Products in Modulating the IGF-1-AKT-mTOR Pathways. *Cancer Research*, 67(7):3043-3053.
400. Feng, Z., Hu, W., Teresky, A.K., Hernando, E., Cordon-Cardo, C., and Levine, A.J., 2007. Declining p53 function in the aging process: A possible mechanism for the increased tumor incidence in older populations. *PNAS*, 104(42):16633-16638. PMCID: PMC2034252
401. Hu, W., Feng, Z., Teresky, A.K., and Levine, A.J., 2007. p53 regulates maternal reproduction through LIF. *Nature*, 450:721-724.
402. Ma, B. and Levine, A.J., 2007. Probing potential binding modes of the p53 tetramer to DNA based on the symmetries encoded in p53 response elements. *Nucleic Acids Research*, 35(22):7733-7747 (Epub ahead of print).

403. Levine, A.J., Hu, W., Feng, Z., and Gil, G., 2007. Reconstructing Signal Transduction Pathways, Challenges and Opportunities. *Proc. Ann. N.Y. Acad. Sci.*, USA, 1115:32-50.
404. Alexe, G., Dalgin, G.S., Scanfeld, D., Tamayo, P., Mesirov, J.P., DeLisi, C., Harris, L., Barnard, N., Martel, M., Levine, A.J., Ganesan, S., Bhanot, G., 2007. High expression of lymphocyte-associated genes in node-negative HER2+ breast cancers correlates with lower recurrence rates. *Cancer Res.*, 67(22):10669-10676.
405. Marsh, G.A., Rabadán, R., Levine, A.J., and Palese, P., 2008. Highly conserved regions of influenza A virus polymerase gene segments are critical for efficient viral RNA packaging. *J Virol.* 208 March 82(5):2295-2304 (Published online 207 December 19).
PMCID:2258914
406. Donehower, L.A. and Levine, A.J., 2008. p53, Cancer, and Longevity. In *Molecular Biology of Aging*, (eds.) Leonard Guarente, Linda Partridge, and Douglas Wallace, Cold Spring Harbor Laboratory Press, 6:127-152.
407. Rabadan, R., Levine, A.J., Krasnitz, M., 2008. Non-Random Reassortment in Influenza A Viruses. *Influenza and Other Respiratory Viruses.* 2(1):9-22.
408. Murphy, E., Vaníček, J., Robins, H., Shenk, T., and Levine, A.J., 2008. Suppression of immediate-early viral gene expression by herpesvirus-coded microRNAs: implications for latency. *PNAS*, 2008 April 8. 105(14):5453-5458 (Published online 2008 March 31).
PMCID: PMC 2291141
409. Levine, A. J., 2008. The Road to Understanding the Origins of Cancer in Humans. In *Life Illuminated: Selected Papers from Cold Spring Harbor*. (eds.) J.A. Witkowski and J.F. Sambrook, Cold Spring Harbor Laboratory Press, 2:169-174.
410. Atwal, G.S., Rabadán, R., Lozano, G., Strong, L., Ruijs, M., Schmidt, M., van'tVeer, L., Nevanlinna, L., Tommiska, J., Aittomaki, K., Bougeard, G., Frebourg, T., Levine, A.J., Bond, G., 2008. An Information-Theoretic Analysis of Genetics, Gender and Age in Cancer Patients. *PLoS One*, 3(4):1-7 (Epub ahead of print). PMCID:PMC2276689
411. Greenbaum, B., Levine, A.J., Bhanot, G., Rabadán, R., 2008. Patterns of Evolution and Host Gene Mimicry in Influenza and Other RNA Viruses. *PLoS Pathogens*, 4(6):1-9.
PCMID:PMC2390760
412. Levine, A.J., Hu, W., Feng, Z., 2008. Tumor Suppressor Genes. In *The Molecular Basis of Cancer*. (eds.) J. Mendelsohn, P. Howley, M. Israel, J. Gray, C. Thompson, Saunders Elsevier, 31-38.
413. Feng, Z., Hu, W., Rajagopal, G., and Levine, A.J., 2008. The tumor suppressor p53: Cancer and aging. *Cell Cycle*, 7(7):842-847.
414. Hu, W., Feng, Z., Atwal, G., and Levine, A.J., 2008. p53: A new player in reproduction. *Cell Cycle*, 7(7):848-852.
415. Robins, H., Krasnitz, M., and Levine, A.J., 2008. Mini Review: The computational

detection of functional nucleotide sequence motifs in the coding regions of organisms. *Exp. Biol. and Med.* 233:665-673.

416. Riley, T., Sontag, E., Chen, P., and Levine, A.J., 2008. Transcriptional control of human p53-regulated genes. *Nature Reviews Molec. Cell Biol.* 9(5):402-412.
417. Yeang, C.H., McCormick, F., and Levine, A.J., 2008. Combinatorial patterns of somatic gene mutations in cancer. *FASEB J*, 22(8):2605-2622.
418. Huang, Y., Krasnitz, M., Rabadan, R., Witten, D.M., Song, Y., Levine, A.J., Ho, D.D., and Robins, H., 2008, A recoding method to improve the humoral immune response to an HIV DNA Vaccine. *PLoS ONE*, 3(9): e3214.
419. Alexe, G., Vijaya Satya, R., Seiler, M., Platt, D., Bhanot, T., Hui, S., Tanka, M., Levine, A.J., and Bhanot, G., 2008. PCA and Clustering Reveal Alternate mtDNA Phylogeny of N and M Clades. *J Mol Evol*, 67(5):465-487.
420. Krasnitz, M., Levine, A.J., and Rabadan, R., 2008. Anomalies in the Influenza Virus Genome Database: New Biology or Laboratory Errors? *J. Virol*, 82(17):8947-8950.
421. Levine, A.J. and Vosburgh, E., 2008. P53 mutations in lymphomas: position matters. *Blood Journal*, 112(8):2997-2998.
422. Vazquez, A., Bond, E., Levine, A.J., and Bond, G., 2008. The genetics of the p53 Pathway, apoptosis and cancer therapy. *Nature Reviews Drug Discovery* 12 (7):979-987.
423. Levine, A.J., 2008, The common mechanisms of transformation by the small DNA tumor viruses: The inactivation of tumor suppressor gene products: p53. *Virology*; 384, 285-293
424. Levine, A.J., 2008. Why do we not yet have a human immunodeficiency virus vaccine? *J Virol*, 82(24):11998-12000.
425. Feng, Z and Levine, AJ, 2009. mTOR Pathway and mTOR Inhibitors. *Cancer Therapy Series: Cancer Drug Discovery and Development*, (eds.) V. Polunovsky, P. Houghton, Springer Science.
426. Shi, H, Tan, S, Zhong, H, Hu, W, Levine, AJ, Xiao, C, Peng, Y, Qi, X, Shou, W, Ma, RZ, Li, Y, Su, B, and Lu, X, 2009. Winter Temperature and UV Are Tightly Linked to Genetic Changes in the p53 Tumor Suppressor Pathway in Eastern Asia. *The American Journal of Human Genetics*, 84:1-8.
427. Yu, X, Riley, T, Levine, AJ, 2009. The regulation of the endosomal compartment by p53 the tumor suppressor gene. *FEBS Journal* 2009, 276 (8): 2201-12.
428. Riley, T, Yu, X, Sontag, E, Levine, AJ, 2009. The p53HMM algorithm: using profile hidden Markov models to detect p53-responsive genes. *BMC Bioinformatics*, 10:111.
429. Kang, H-J, Feng, Z, Sun, Y, Atwal, G, Maureen E. Murphy, ME, Rebbeck, TR,

Rosenwaks, Z, Levine, AJ, Hu, W, 2009 Jun 16. Single nucleotide polymorphisms in the p53 pathway regulate fertility in humans. *PNAS*, 106(24):9761-6.
Epub 2009 May 22. PMCID: PMC2700980

430. Atwal, GS, Kirchhoff, T, Bond, EE, Montagna, M, Menin, C, Bertorelle, R, Scaini, MC, Bartel, F, Böhnke, A, Pempe, C, Gradhand, E, Hauptmann, S, Offit, K, Levine, AJ, Bond, GL, 2009. Altered tumor formation and evolutionary selection of genetic variants in the human MDM4 oncogene. *PNAS* 2009, 106 (25):10236-41.
431. Greenbaum BD, Rabadan R, Levine, AJ, 2009. Patterns of Oligonucleotide Sequences in Viral and Host Cell RNA Identify Mediators of the Host Innate Immune System. *PLoS ONE*, 4(6): e5969.
432. Harris C, DeWan A, Zupnik A, Contracto T, Gabriel A, Prives C, Levine AJ, Hoh J, 2009. p53 Responsive Elements in Human Retrotransposons. *Oncogene* 28(44):3857-3865. PMCID: PMC3193277.
433. Levine AJ, Oren M, 2009. The first 30 years of p53: growing ever more complex. *Nature Reviews: Cancer*, 9 (10):749-758. PMCID:2771725.
434. Kulkarni D, Vazquez A, Haffty BG, Bandera E, Hu W, Sun Y, Toppmeyer DL, Levine A, Hirshfield KM, 2009. A Polymorphic Variant in Human MDM4 Associates with Accelerated Age of Onset of Estrogen Receptor Negative Breast Cancer. *Carcinogenesis*, 30(11):1910-1915.
435. Grochola LF, Vazquez A, Bond EE, Würfl P, Taubert H, Müller TH, Levine AJ, Bond GL, 2009. Recent Natural Selection Identifies a Genetic Variant in a Regulatory Subunit of Protein Phosphatase 2A that Associates with Altered Cancer Risk and Survival. *Clin Cancer Res.*, 15(19):6301-8.
436. Puzio-Kuter AM, Levine AJ, 2009. Stem cell biology meets p53. *Nature Biotechnology* 27(10): 914-915.
437. Belyi VA, Levine AJ, 2009. One billion years of p53/p63/p73 evolution. *PNAS* 106(42):17609-17610.
438. Hu W, Feng Z, Levine AJ, 2009. The regulation of human reproduction by p53 and its pathway. *Cell Cycle* (8)22:3621-3622.
439. Belyi VA, Ak P, Markert E, Wang H, Hu W, Puzio-Kuter A, Levine AJ, 2009. The Origins and Evolution of the p53 Family of Genes. *Cold Spring Harbor Perspect Biol* 2(6): a001198. Epub 2009 Dec 16. PMID: 20516129
440. Vazquez A, Grochola LF, Bond EE, Levine AJ, Taubert H, Muller TH, Wurl P, Bond GL, 2009. Chemosensitivity Profiles Identify Polymorphisms in the p53 Network Genes 14-3-3 τ and CD44 That Affect Sarcoma Incidence and Survival. *Cancer Res.* 70(1):172-80.
441. Greenbaum, B, Trifonov, V, Khiabani, H, Levine, AJ, Rabadan, R, 2009. The emergence

of 2009 H1N1 Pandemic Influenza, Chapter for the Second Edition of the Book *Influenza Vaccines for the Future*, Eds Rappuoli & Del Giudice, Birkhaeuser.

442. Jeong BS, Hu W, Belyi V, Rabadan R, Levine AJ, 2010. Differential levels of transcription of p53-regulated genes by the arginine/proline polymorphism: p53 with arginine at codon 72 favors apoptosis. *FASEB J.* 24:1347-53.
443. Hirshfield KM, Rebbeck TR, Levine AJ, 2010. Germline mutations and polymorphisms in the origins of cancers in women. 2010. *J Oncol.* (1):1-11:29767. [Epub 2010]
444. Hu W, Zhang C, Wu R, Sun Y, Levine A, Feng Z, 2010. Glutaminase 2, a novel p53 target gene regulating energy metabolism and antioxidant function. *PNAS* 107(16):7455-7460.
445. Harris, CR, Normart, R, Yang, Q, Stevenson, E, Haffty, BG, Ganesan, S, Cordon-Cardo, C, Levine, AJ, and Tang, LH, 2010. Association of Nuclear Localization of a Long Interspersed Nuclear Element-1 Protein in Breast Tumors with Poor Prognostic Outcomes. *Genes & Cancer* 1(2):115-124. PMID 20948976 PMCID: PMC2952938 NIHMSID: NIHMS230404
446. Markert EK, Baas N, Levine AJ, Vazquez A, 2010. Higher order Boolean networks as models of cell state dynamics. *Journal of Theoretical Biology* 7:264(3):945-51.
447. Feng Z, Levine AJ, 2010 July. The regulation of energy metabolism and the IGF-1/mTOR IGF-1/mTOR pathways by the p53 protein. *Trends Cell Biol.* 20(7):427–434.
448. Mizuno H, Atwal G, Wang H, Levine AJ, Vazquez, A, 2010. Fine-scale detection of population-specific linkage disequilibrium using haplotype entropy in the human genome. *BMC Genetics* 11:27. PMCID:PMC2873552
449. Lui H, Brannon AR, Reddy AK, Alexe G, Seiler MW, Arreola A, Oza JH, Yao M, Juan D, Liou LS, Ganesan S, Levine AJ, Rathmell WK, Bhanot GV, 2010. Identifying mRNA targets of microRNA dysregulated in cancer: with application to clear cell Renal Cell Carcinoma. *BMC Systems Biology* 27; 4(1):51. PMCID:PMC2876063
450. Ak P, Levine AJ, 2010 Oct, 24. p53 and NF- κ B: different strategies for responding to stress lead to functional antagonism. *FASEB Journal* (10):3643-52. Epub Jun 8. Review. PMID: 20530750
451. Hu W, Chan C, Wu R, Zhang C, Sun Y, Song JS, Tang LH, Levine AJ, Feng Z 2010. Negative Regulation of Tumor Suppressor p53 by MicroRNA miR-504. *Molecular Cell.* 38, 689–699. PMCID: PMC2900922, NIHMSID: NIHMS211731
452. Levine AJ, Lane DP, editors, 2010. The P53 Family: Cold Spring Harbor Perspectives in Biology. *Cold Spring Harbor Laboratory Press.*
453. Belyi VA, Ak P, Markert E, Wang H, Hu W, Puzio-Kuter A, Levine AJ, 2010. The Origins and Evolution of the p53 Family of Genes. The P53 Family: Chapter 1, Cold Spring Harbor Perspectives in Biology. *Cold Spring Harbor Laboratory Press.*

454. Lane DP, Levine AJ, 2010. p53 Research: The Past Thirty Years and the Next Thirty Years. The P53 Family: Chapter 23, Cold Spring Harbor Perspectives in Biology. *Cold Spring Harbor Laboratory Press*.
455. Mehta MS, Vazquez A, Kulkarni DA, Kerrigan JE, Atwal G, Metsugi S, Toppmeyer DL, Levine AJ, Hirshfield KM, 2011 Feb. Polymorphic variants in TSC1 and TSC2 and their association with breast cancer phenotypes. *Breast Cancer Res Treat*. 125(3):861-8. doi: 10.1007/s10549-010-1062-1. Epub 2010 Jul 25. PMID: 2058316
PMCID: PMC3876413
456. Vazquez A, Kulkarni D, Grochola LF, Bond GL, Barnard N, Toppmeyer D, Levine AJ, Hirshfield KM, 2011 May 15. A genetic variant in a PP2A regulatory subunit encoded by the PPP2R2B gene associates with altered breast cancer risk and recurrence. *Int J Cancer*. 128(10):2335-43. doi: 10.1002/ijc.25582. PMCID: PMC3902652, NIHMSID: NIHMS536323
457. Belyi VA, Levine AJ, Skalka AM, July 2010. Unexpected inheritance: multiple integrations of ancient bornavirus and ebolavirus/marburgvirus sequences in vertebrate genomes. *PLoS Pathog*. 6(7): e1001030. PMCID: PMC2912400
458. Post SM, Quintás-Cardama A, Pant V, Iwakuma T, Hamir A, Jackson JG, Maccio DR, Bond GL, Johnson DG, Levine AJ, Lozano G. 2010. A High-Frequency Regulatory Polymorphism in the p53 Pathway Accelerates Tumor Development. *Cancer Cell*. Sept 14; 18(3):220-30. PMCID: PMC2944041, NIHMSID: NIHMS231385
459. Feng Z, Levine, AJ, 2010. The Regulation of the IGF-1/mTOR Pathway by the p53 Tumor Suppressor Gene Functions. mTOR Pathway and mTOR Inhibitors in Cancer Therapy, Cancer Drug Discovery and Development. Ed. Vitaly A. Polunovsky & Peter J. Houghton. *Humana Press* 37-48. PMCID:PM2921989
460. Belyi VA, Levine AJ, Skalka AM 2010. Sequences from Ancestral Single-Stranded DNA Viruses in Vertebrate Genomes: the *Parvoviridae* and *Circoviridae* Are More than 40 to 50 Million Years Old. *Journal of Virology* 84(23):12458-12462. PMID 20861255
PMCID: PMC2976387
461. Hu W, Feng Z, Modica I, Klimstra DS, Song L, Allen PJ, Brennan MF, Levine AJ, Tang, LH, 2010 May 15. Gene Amplifications in Well-Differentiated Pancreatic Neuroendocrine Tumors Inactivate the p53 Pathway. *Genes Cancer* 1(4):360-368.
PMCID: PMC2943645, NIHMSID: NIHMS228149
462. Levine AJ, Puzio-Kuter A, 2010. The Control of the Metabolic Switch in Cancer by Oncogenes and Tumor Suppressor Genes. *Science* 330 (6009):1340 -1344.
PMID: 21127244
463. Mizuno H, Spike BT, Wahl GM, Levine AJ. 2010 Dec 28. Inactivation of p53 in breast cancers correlates with stem cell transcriptional signatures. *PNAS* 107(52):22745-50. Epub 2010 Dec 13. PMID: 21149740 PMCID: PMC3012457
464. Feng Z, Zhang C, Kang H, Sun Y, Wang H, Naqvi A, Frank A, Rosenwaks Z, Murphy

- M, Levine A, Hu W, 2011 July. The regulation of female reproduction by p53 and its family members. *FASEB J.* 25(7): 2245-55. Epub 2011 March 14. PMCID: PMC3114525
465. Nicolau, M, Levine, AJ, Carlsson, G, 2011 April 26. Topology based data analysis identifies a subgroup of breast cancers with a unique mutational profile and excellent survival. *PNAS* 108(17) :7265-70. Epub 2011 Apr 11. PMCID: PMC3084136
466. Levine AJ, Tomasini R, McKeon FD, Mak TW, Melino G, April 2011. The p53 family: guardians of maternal reproduction. *Nature Reviews Molecular Cell Biology*, 12:259-265.
467. Levine AJ, 2011. The paths to death and differentiation. *Cell Death and Differentiation* 18, 1391–1392.
468. Levine AJ, 2011 April. Introduction: The Changing Directions of p53 Research. *Genes & Cancer* 2(4):382-4. PMID: 21785490 PMCID: PMC3135647
469. Feng Z, Hu W, Levine AJ, Lin M, Wang X, Wu R, Yang B, Zhang C, 2011 Sep 27. Parkin, a p53 target gene, mediates the role of p53 in glucose metabolism and the Warburg effect. *PNAS* 108(39):16259-64. Epub 2011 Sep 19. PMCID: PMC3182683
470. Markert EK, Mizuno H, Vazquez A, Levine AJ, 2011 Dec 27. Molecular classification of prostate cancer using curated expression signatures. *PNAS* 108(52):21276-21281. Published online 2011 November 28. PMCID: PMC3248553
471. Freed-Pastor WA, Mizuno H, Zhao X, Langerød A, Moon SH, Rodriguez-Barrueco R, Barsotti A, Chicas A, Li W, Polotskaia A, Bissell MJ, Osborne TF, Tian B, Lowe SW, Silva JM, Børresen-Dale AL, Levine AJ, Bargonetti J, Prives C. 2012 Jan 20. Mutant p53 Disrupts Mammary Acinar Morphogenesis via the Mevalonate Pathway, *Cell* 148 1-2:244-58. PMCID: PMC3511889, NIHMSID: NIHMS346590
472. Levine AJ, 2012 Jan 15. The evolution of the p53 family of genes. Comment on: Lane DP, et al. *Cell Cycle* 2011; 10:4272-9. *Cell Cycle*. 2012 Jan 15;11(2):214. PMID: 22214668. DOI:10.4161/cc.11/2.18899
473. Formosa A, Lena AM, Markert EK, Cortelli S, Miano R, Mauriello A, Croce N, Vandesompele J, Mestdagh P, Finazzi-Agrò E, Levine AJ, Melino G, Bernardini S, Candi E, 2012 Feb DNA methylation silences miR-132 in prostate cancer. *Oncogene* 31:1-8.
474. Greenbaum BD, Li OT, Poon LL, Levine AJ, Rabadan R, 2012 Feb 28. Viral reassortment as an information exchange between viral segments. *PNAS* 109(9):3341-6. PMCID: PMC3295259
475. Hu W, Feng Z, Levine AJ, 2012 Mar. The Regulation of Multiple p53 Stress Responses is Mediated through MDM2. *Genes Cancer*. 3(3-4):199-208. doi: 10.1177/1947601912454734. PMCID:PMC3494373
476. Peschiaroli A, Giacobbe A, Formosa A, Markert EK, Bongiorno-Borbone L, Levine AJ,

- Candi E, D'Alessandro A, Zolla L, Finazzi Agrò A, Melino G, 2012 Apr 2. miR-143 regulates hexokinase 2 expression in cancer cells. *Oncogene* 1-6.
PMID: 22469988
477. Feng Z, Liu L, Zhang C, Zheng T, Wang J, Lin M, Zhao Y, Wang X, Levine AJ, Hu W, 2012 May 1. Chronic restraint stress attenuates p53 function and promotes tumorigenesis. *PNAS* 109(18):7013-8. Epub 2012 Apr 16. PMCID: PMC3345015
478. Yu, X, Vazquez A, Levine, AJ, Carpizo, DR, 2012 May 15. Allele-Specific p53 Mutant Reactivation. *Cancer Cell* 21(5): 614-625. PMCID: PMC3366694, NIHMSID: NIHMS372800
479. Bilal E, Vassallo K, Toppmeyer D, Barnard N, Rye IH, Almendro V, Russnes H, Børresen-Dale A-L, Levine AJ, Bhanot G, Ganesan S, June 2012. Amplified loci on chromosomes 8 and 17 predict early relapse in ER-positive breast cancers. *PLoS ONE*, 7(6): e38575. PMCID: PMC3374812
480. Tang LH, Contractor T, Klimstra DS, Du Y-CN, Allen PJ, Brennan MF, Levine AJ Harris CR, 2012. Attenuation of the Rb pathway in Pancreatic Neuroendocrine Tumors Due to Increased Cdk4/Cdk6. *Clinical Cancer Research* 18:4612-4620. Epub 2012 July 3.
481. Fryburg DA, Latino LJ, Tagliamonte J, Kenney RD, Song DH, Levine AJ, de Graaf D, August 2012. *Personalized Medicine*, 9(6): 579-583.
482. Weisbart RH, Gera JF, Chan G, Hansen JE, Li E, Cloninger C, Levine AJ, Nishimura RN, 2012 Aug 3. A cell-penetrating bispecific antibody for therapeutic regulation of intracellular targets. *Mol. Cancer Ther.* 2012 Aug 3. [Epub ahead of print]
483. Wong C, Vosburgh E, Levine AJ, Cong L, Xu EY, 2012. Human Neuroendocrine Tumor Cell Lines as a Three-Dimensional Model for the Study of Human Neuroendocrine Tumor Therapy. *J. Vis. Exp.* (66):4218. Published online 2012 August 14. doi: 10.3791/4218 PMCID: PMC3486771
484. Tucci P, Agostini M, Grespi F, Markert EK, Terrinoni A, Vousden KH, Muller PA, Dötsch V, Kehrloesser S, Sayan BS, Giaccone G, Lowe SW, Takahashi N, Vandenabeele P, Knight RA, Levine AJ, Melino G, 2012 September 18. Loss of p63 and its miR-205 target results in enhanced cell migration and metastasis in prostate cancer. *PNAS* 109(38): 15312–15317. Published online 2012 September 4. PMCID: PMC3458363
485. Yi L, Lu C, Hu W, Sun Y, Levine AJ, 2012 November 1. Multiple roles of p53 related pathways in somatic cell reprogramming and stem cell differentiation. *Cancer Res* 72(21): 5635-5645 PMCID: PMC3494373
487. Wagh K, Bhatia A, Alexe G, Reddy A, Ravikumar V, Seiler M, Boemo M, Yao M, Cronk L, Naqvi A, Ganesan S, Levine AJ, Bhanot G, 2012 Lactase Persistence and Lipid Pathway Selection in the Maasai, *PLoS One*. 7(9):e44751. doi: 10.1371/ journal.pone.0044751. Epub 2012 Sep 28 PMCID: PMC3461017

488. Markert EK, Levine, AJ, Vazquez, A, 2012 Oct 4. Proliferation and tissue remodeling: the hallmarks revisited. *Cell Death and Disease* 3:e397. doi: 10.1038/cddis. PMID: PMC3481128
489. Lukic, S, Nicolas, J-C, and Levine, 2014. *Cell Death and Differentiation* 21, 381–387; doi:10.1038/cdd.2013.150. Published online 25 October 2013.
490. Levine AJ, Harris CR, Puzio-Kuter AM, 2012 Nov 3. The Interfaces Between Signal Transduction Pathways: IGF-1/mTor, p53 and the Parkinson Disease Pathway. *Oncotarget* 11:1301-7. PMID: PMC371779
491. Levine AJ, Greenbaum B, 2012 The Maintenance of Epigenetic States by p53: The Guardian of the Epigenome. *Oncotarget* 3(12),1503-1504. PMID: PMC3681489
492. Kobayashi S, Yamada-Okabe H, Suzuki M, Natori O, Kato A, Matsubara K, Chen YJ, Yamazaki M, Funahashi S, Yoshida K, Hashimoto E, Watanabe Y, Mutoh H, Ashihara M, Kato C, Watanabe T, Yoshikubo T, Tamaoki N, Ochiya T, Kuroda M, Levine AJ, Yamazaki T. 2012 Dec 30. LGR5-Positive Colon Cancer Stem Cells Interconvert with Drug Resistant LGR5-Negative Cells and are Capable of Tumor Reconstitution. *Stem Cells* (12):2631-44. doi: 10.1002/stem.1257
493. Giacobbe A, Bongiorno-Borbone L, Bernassola F, Terrinoni A, Markert EK, Levine AJ, Feng Z, Agostini M, Zolla L, Agrò AF, Notterman DA, Melino G, Peschiaroli A, 2013 May 1. p63 regulates glutaminase 2 expression. *Cell Cycle* 12(9):1395–1405. PMID: PMC3674067
494. Huang Q, Yu L, Levine AJ, Nussinov R, Ma B, 2014 Jan. Dipeptide analysis of p53 mutations and evolution of p53 family proteins. *Biochim Biophys Acta*. 1844(1 Pt B):198-206. doi: 10.1016/j.bbapap.2013.04.002. Epub 2013 Apr 10.
495. Zhang C, Liu J, Liang Y, Wu R, Zhao Y, Hong X, Lin M, Yu H, Liu L, Levine AJ, Hu W, Feng Z, 2013 Dec 17. Tumor-associated mutant p53 drives the Warburg effect. *Nature Communications* 4:2935. doi:10.1038/ncomms3935. PMID: PMC3969270. NIHMSID: NIHMS540681
496. Greenbaum BD, Cocco S, Levine AJ, 2014 Apr 1. Monasson R. Quantitative theory of entropic forces acting on constrained nucleotide sequences applied to viruses. *PNAS* 111(13):5054-9. doi: 10.1073/pnas.1402285111. Epub 2014 Mar 17. PMID: PMC3977288
497. Levine AJ, 2014, Harold S Ginsberg 1917 -2003. A Biographical Memoir, National Academy of Sciences USA, Biographical Memoirs. Published online 2014 April 17.
498. Chen W, Wong C, Vosburgh E, Levine AJ, Foran DJ, Xu EY, 2014 Jul 8. High-throughput Image Analysis of Tumor Spheroids: A User-friendly Software Application to Measure the Size of Spheroids Automatically and Accurately. *J Vis Exp.* (89):51639. doi: 10.3791/51639. PMID: PMC4212916

499. Yi L, Sun Y, Levine AJ, 2014 Oct. Selected drugs that inhibit DNA methylation can preferentially kill p53 deficient cells. *Oncotarget* 5(19):8924-8936. Published online 2014 Sept. 10. doi:10.18632/oncotarget.2441. PMCID:PMC4253407
500. Wong C, Laddha SV, Tang L, Vosburgh E, Levine AJ, E Normant, Sandy P, Harris CR, Chan CS, Xu EY, 2014. The bromodomain and extra-terminal inhibitor cpi203 enhances the antiproliferative effects of rapamycin on human neuroendocrine tumors. *Cell Death and Disease* 5, e; doi:10.1038/cddis.2014.396 PMCID: PMC4237236
501. Hait WN, Levine AJ, 2014 Sep 24. Genomic complexity: a call to action. *Sci. Transl. Med.* 6(255):255cm10. doi:10.1126/scitranslmed.3009148. PMCID: PMC25253671
502. Ariffin H, Hainaut P, Puzio-Kuter A, Choong SS, Chan AS, Tolkunov D, Rajagopal G, Kang W, Lim LL, Krishnan S, Chen KS, Achatz MI, Karsa M, Shamsani J, Levine AJ, Chan CS, 2014 Oct 28. Whole-genome sequencing analysis of phenotypic heterogeneity and anticipation in Li-Fraumeni cancer predisposition syndrome. *PNAS* 111(43):15497-501. doi: 10.1073/pnas.1417322111. Epub 2014 Oct 13. PMCID:PMC4217424 [Available on 2015/4/28]
503. Dudgeon C, Chan C, Kang W, Sun Y, Emerson R, Robins H, Levine AJ, 2014 Dec 1. The evolution of thymic lymphomas in p53 knockout mice. *Genes Dev.* 28(23):2613-20. doi: 10.1101/gad.252148.114 PMCID: PMC4248292
504. Amelio I, Inoue S, Markert EK, Levine AJ, Knight RA, Mak TW, Melino G, 2015 Jan 6. TAp73 opposes tumor angiogenesis by promoting hypoxia-inducible factor 1 α degradation. *PNAS* 112(1):226-31. PMCID: PMC4291637
505. AM Puzio-Kuter, SV Laddha, M Castillo-Martin, Y Sun, C Cordon-Cardo, CS Chan AJ Levine, 2015 Nov. Involvement of tumor suppressors PTEN and p53 in the formation of multiple subtypes of liposarcoma. *Cell Death Differ.* 22(11):1785–1791. PMCID: PMC4648325
506. Zhang X, Schulz R, Edmunds S, Krüger E, Markert E, Gaedcke J, Cormet-Boyaka E, Ghadimi M, Beissbarth T, Levine AJ, Moll UM, Dobbstein M, 2015 July 16 MicroRNA-101 Suppresses Tumor Cell Proliferation by Acting as an Endogenous Proteasome Inhibitor via Targeting the Proteasome Assembly Factor POMP. *Molecular Cell* 59:243–257. PMID: 26145175
507. Levine A, 2015 Jul. Stem cells, aging and cancers. *Aging* (Albany NY). 7(7):457–458. PMCID: PMC4543030
508. Blanden AR, Yu X, Loh SN, Levine AJ, Carpizo DR, 2015 Nov. Reactivating mutant p53 using small molecules as zinc metallochaperones: awakening a sleeping giant in cancer. *Drug Discov Today* 20(11):1391–1397. doi:10.1016/j.drudis.2015.07.006. Epub 2015 Jul 20. PMID: 26205328 PMCID: PMC4922747
509. D'Abramo M, Bešker N, Desideri A, Levine AJ, Melino G, Chillemi G, 2016 June 23. The p53 tetramer shows an induced-fit interaction of the C-terminal domain with the DNA-binding domain. *Oncogene* 35(25):3272-81. doi:10.1038/onc.2015.388.

Epub 2015 Oct 19. PMID: 26477317 PMCID:PMC4929483

510. Tanne A, Muniz LR, Puzio-Kuter A, Leonova KI, Gudkov AV, Ting DT, Monasson R, Cocco S, Levine AJ, Bhardwaj N, Greenbaum BD, 2015, Dec 8. Distinguishing the immunostimulatory properties of noncoding RNAs expressed in cancer cells. *PNAS* 112(49):15154-15159. doi: 10.1073/pnas.1517584112. Epub 2015 Nov 2. PMCID: PMC4679042
511. Levine AJ, Chan C, Dudgeon C, Puzio-Kuter A, Hainaut P, 2015 Dec 7. The Evolution of Tumors in Mice and Humans with Germline p53 Mutations. *Cold Spring Harbor Laboratory Press Cold Spring Harbor Symposium Quantitative Biology*. Volume LXXX: 1-7.
512. Marbach-Bar N, Bahat A, Ashkenazi S, Golan-Mashiach M, Haimov O, Wu, S-Y, Chiang C-M, Puzio-Kuter A, Hirshfield KM, Levine AJ, Dikstein R, 2016 Feb 18. DTIE, a novel core promoter element that directs start site selection in TATA-less genes. *Nucl. Acids Res.* 44(3):1080-94. PMCID: PMC4756809
513. Guillermina L, Levine AJ, editors. The p53 Protein: From Cell Regulation to Cancer. A subject collection from Cold Spring Harbor Perspectives in Medicine. *Cold Spring Harbor Laboratory Press* 2016.
514. Chillemi G, Kehrlöesser S, Bernassola F, Desideri A, Dötsch V, Levine AJ, Melino G. 2017 Apr 3. Structural Evolution and Dynamics of the p53 Proteins. *Cold Spring Harb Perspect Med.* 7(4). doi: 10.1101/cshperspect.a028308. Epub ahead of print. PMID:27091942 PMCID:PMC5378015
515. Levine AJ, Puzio-Kuter AM, Chan CS, Hainaut P, 2016. The Role of the p53 Protein in Stem-Cell Biology and Epigenetic Regulation. *Cold Spring Harb Perspect Med.* doi:10.1101/cshperspect.a026153
516. Contractor T, Kobayashi S, da Silva E, Clausen R, Chan C, Vosburgh E, Tang LH, Levine AJ, Harris CR, 2016 Apr 20. Sexual dimorphism of liver metastasis by murine pancreatic neuroendocrine tumors is affected by expression of complement C5. *Oncotarget* doi. 10.18632/oncotarget.8874
517. Levine AJ, Ting DT, Greenbaum B, 2016 Jun. P53 and the defenses against genome instability caused by transposons and repetitive elements. *Bioessays* 38(6):508-13. doi:10.1002/bies.201600031.
518. Camara PG, Rosenbloom DIS, Emmett KJ, Levine AJ, Rabadan R, 2016 July 2 Topological data analysis generates high-resolution, genome-wide maps of human recombination. *Cell Systems* 2(7):1–12. PMID:27345159
519. Jenkins CL, Bagarazzi, ML, Kiem, H-P, Levine, AJ, Ando D, June CH, Reid T, Emery DW, 2016 July. Rethinking the Regulatory Infrastructure for Human Gene Transfer Clinical Trials. *Molecular Therapy* 24(7):1173-1177. PMID:27506378
520. Cámara PG, Levine AJ, Rabadán R, 2016 Aug 17. Inference of Ancestral Recombination

Graphs through Topological Data Analysis. *PLoS Comput Biol.* 12(8):e1005071.
doi: 10.1371/journal.pcbi.1005071.eCollection 2016. PMID:27532298
PMCID: PMC4988722

521. Zhu J, Dou Z, Sammons MA, Levine AJ, Berger, SL, 2016 Aug 30. Lysine methylation represses p53 activity in teratocarcinoma cancer cells. *PNAS* 113(35):9822-9827. PMID: PMC5024588
522. Levine AJ, 2017 Jan. 31. The p53 protein plays a central role in the mechanism of action of epigenetic drugs that alter the methylation of cytosine residues in DNA. *Oncotarget* 8(5):7228-7230. PMID: 28129641 PMCID:PMC5352316
523. Sethna Z, Elhanati Y, Dudgeon CS, Callan CG Jr, Levine AJ, Mora T, Walczak AM, 2017 Feb.14. Insights into immune system development and function from mouse T-cell repertoires. *PNAS* 114(9):2253–2258. PMID: 28196891 PMCID: PMC5338539
524. Levine AJ, 2017. The Evolution of Tumor Formation in Humans and Mice with Inherited Mutations in the p53 Gene. *Curr Top Microbiol Immunol* 407:205-221. Hunter, Eric, and Klaus Bister, eds. Viruses, Genes, and Cancer. doi:10.1007/82_2017_5. PMID:28349284 PMCID:PMC6383363
525. Levine, AJ, 2017 Feb 1. The Future of Systems Biology. *Current Opinion in Systems Biology* v–vii.
526. Levine AJ and Berger SL, 2017. The interplay between epigenetic changes and the p53 protein in stem cells. *Genes Dev.* 31:1195-1200. PMID: 28765161 PMCID:PMC5558922
527. Balachandran VP, Łuksza M, Zhao JN, Makarov V, Moral JA, Remark R, Herbst B, Askan G, Bhanot U, Senbabaoglu Y, Wells DK, Cary CIO, Grbovic-Huezo O, Attiyeh M, Medina B, Zhang J, Loo J, Saglimbeni J, Abu-Akeel M, Zappasodi R, Riaz N, Smoragiewicz M, Kelley ZL, Basturk O Gönen M, Levine AJ, Allen PJ, Fearon DT, Merad M, Gnjjatic S, Iacobuzio-Donahue CA, Wolchok JD, DeMatteo RP, Chan TA, Greenbaum BD, Merghoub T, Leach SD, 2017 Nov 23. Identification of unique neoantigen qualities in long-term survivors of pancreatic cancer. *Nature* 551(7681):512-516. PMID: 28267733
528. Łuksza M, Riaz N, Makarov V, Balachandran VP, Hellmann MD, Solovyov A, Rizvi NA Merghoub T, Levine AJ, Chan TA, Wolchok JD, Greenbaum BD, 2017 Nov 23. A neoantigen fitness model predicts tumour response to checkpoint blockade immunotherapy. *Nature* 551(7681):517-520. PMID: 29132144
529. Levine AJ, 2018 Jan. Reviewing the future of the P53 field. *Cell Death Differ.* 25(1):1-2. doi: 10.1038/cdd.2017.181. PMID: 29227987
530. Baugh EH, Ke H, Levine AJ, Bonneau RA, Chan CS, 2018 Jan. Why are there hotspot mutations in the TP53 gene in human cancers? *Cell Death Differ.* 25(1):154-160. PMID: 29099487 PMCID: PMC5729537 [Available on 2019-01-01]

531. Wolff RA, Wang-Gillam A, Alvarez H, Tiriach H, Engle D, Hou S, Groff AF, San Lucas A, Bernard V, Allenson K, Castillo J, Kim D, Mulu F, Huang J, Stephens B, Wistuba II, Katz M, Varadhachary G, Park Y, Hicks J, Chinnaiyan A, Scampavia L, Spicer T, Gerhardinger C, Maitra A, Tuveson D, Rinn J, Lizée G, Yee C, Levine AJ, 2018 Mar 13. Dynamic changes during the treatment of pancreatic cancer. *Oncotarget* 9(19):14764–14790. PMID: PMC5871077
532. Levine AJ. Targeting Therapies for the p53 Protein in Cancer Treatments. *Annul. Review of Cancer Biology* 2019. 3:1.1-1.14. doi.org/10.1146/annrev-cancerbio-030518-055455
533. Nogalski MT, Solovyov A, Kulkarni AS, Desai N, Oberstein A, Levine AJ, Ting DT, Shenk T, Greenbaum BD, 2019 Jan 9. A tumor-specific endogenous repetitive element is induced by herpesviruses. *Nature Communications* 10(90):1-13.
534. Levine AJ, Jenkins NA, Copeland NG, 2019 Jan 14. The Roles of Initiating Truncal Mutations in Human Cancers: The Order of Mutations and Tumor Cell Type Matters. *Cancer Cell* 35(1):10-15. NIHMSID: NIHMS1520982 DOI: 10.1016/j.ccell.2018.11.009 PMID: PMC6376970 PMID: 30645969
535. Levine AJ, 2019 July 30. The many faces of p53: something for everyone. *J Mol Cell Biol.* 11(7):524-530.
536. Wong C, Tang LH, Davidson C, Vosburgh E, Chen W, Foran D, Notterman DA, Levine AJ, Xu EY, 2020. Two Well-differentiated Pancreatic Neuroendocrine Tumor Mouse Models. *Cell Death and Differentiation* 27 (1): 269-283 doi: 10.1038/s41418-019-0355-0.
537. Mathews JC, Nadeem S, Levine AJ, Pouryahya M, Deasy JO, Tannenbaum A, 2019 Sep 30. Robust and Interpretable PAM50 Reclassification Exhibits Survival Advantage for Myoepithelial and Immune Phenotypes. *NPJ Breast Cancer* 5 (30):1-8. doi:10.1038/s41523-019-0124-8 PMID: PMC6733897
538. Christen SP, Levine AJ, 2019. Facilitating Cross-Disciplinary Interactions to Stimulate Innovation: Stand Up to Cancer's Matchmaking Convergence Ideas Lab. *Strategies for Team Science Success*. Chapter 19, 251-258. Springer Nature Switzerland AG doi.org/10.1007/978-3-030-20992-6
539. Levine AJ, 2020. P53 and the Immune Response: 40 years of Exploration - a Plan for the Future. Review in special issue "p53 in Cancer and beyond-40 Years after Its Discovery". Guest Editors: Candeias, Marco M. and Ohki, Reiko. *Int. J. Mol. Sci.* 21(2). pii: E541. doi:10.3390/ijms 21020541 PMID: PMC7013403 PMID: [31952115](#)
540. Levine AJ, Published online: 13 May 2020. p53: 800 Million Years of Evolution and 40 Years of Discovery. *Nature Reviews Cancer* doi.org/10.1038/s41568-020-0262-1

541. Mathews J, Nadeem S, Pouryahya M, Belkhatir Z, Deasy JO, Levine AJ, Tannenbaum A, 2020. Functional Network Analysis Reveals an Immune Tolerance Mechanism in Cancer. *PNAS* 117(28) doi: 10.1073/pnas.2002179117
542. Dobbstein M, Levine AJ. First Published 26 April 2020. Mdm2: Open Questions. *Cancer Sci.* 2020;111:2203-2211. <https://doi.org/10.1111/cas.14433>
543. Levine AJ, 2020. Non-Random Selection of Cancer-Causing Mutations in Tissue-Specific Stem Cells Cause Cancer. *JSM Clin Oncol Res* 8(1): 1063
544. Chan CS, Sun Y, Ke H, Zhao Y, Belete M, Zhang C, Feng Z, Levine AJ, Hu W. Genetic and stochastic influences upon tumor formation and tumor types in Li-Fraumeni mouse models. *Life Science Alliance* vol. 4 no. 3 e202000952, Published online 29 December 2020. DOI: 10.26508 PMCID: PMC7772779 PMID: 33376133
545. Zhao J, Rabadan P, Levine AJ. 2021 Mar 19. Pregnancy specific glycoproteins: a possible mediator of immune tolerance of cancers. *J Cell Immunol.* 3(2): 109-117
546. Amelio I, Melino G, Levine AJ. 2021. Bispecific antibodies come to the aid of cancer immunotherapy. *Molecular Oncology* 15 (7) 1759
<https://febs.onlinelibrary.wiley.com/doi/10.1002/1878-0261.12977>
547. Levine AJ, 2021. Spontaneous and inherited TP53 genetic alterations. *Oncogene* DOI 10.1038/s41388-021-01991-3 <https://rdcu.be/ctZBs>
548. Elkin R, Oh JH, Liu YL, Selenica P, Weigelt B, Reis-Filho JS, Zamarin D, Deasy JO, Norton L, Levine AJ, Tannenbaum AR. 2021. Geometric network analysis provides prognostic information in patients with high grade serous carcinoma of the ovary treated with immunecheckpoint inhibitors. *npj Genom. Med.* 6, 99 (2021). DOI 10.1038/s41525-021-00259-9
549. Levine AJ, 2022. Targeting The P53 Protein for Cancer Therapies: The Translational Impact of TP53. *Cancer Res.* 82(3): 362-364 (2022). DOI: 10.1158/0008-5472.CAN-21-2709 PMCID: PMC8852246 PMID: 35110395
550. Levine AJ, 2022. Exploring the future of research in the Tp53 field. *Cell Death Differ* (2022). <https://doi.org/10.1038/s41418-022-00986-1>
551. Hoyos D, Greenbaum B. & Levine AJ, 2022. The genotypes and phenotypes of missense mutations in the proline domain of the p53 protein. *Cell Death Differ.*
<https://doi.org/10.1038/s41418-022-00980-7>
552. Hoyos D, Zappasodi R, Schulze I, Sethna Z, de Andrade KC, Bajorin DF, Bandlamudi C, Callahan MK, Funt SA, Hadrup SR, Holm JS, Rosenberg JE, Shah SP, Vázquez-García I, Weigelt B, Wu M, Zamarin D, Campitelli LF, Osborne EJ, Klinger M, Robins HS, Khincha PP, Savage SA, Balachandran VP, Wolchok JD, Hellmann MD, Merghoub T, Levine AJ, Łuksza M, Greenbaum BD, June 2022. Fundamental immune-oncogenicity trade-offs define driver mutation fitness. *Nature* 606 (7912):172-179. <https://doi.org/10.1038/s41586->

[022-04696-z](#) Epub 2022 May 11. Erratum in: Nature. 2022 May 31;; PMID: 35545680; PMCID: PMC9159948.

553. Tran AP, Tralie CJ, Reyes J, Moosmüller C, Belkhatir Z, Kevrekidis IG, Levine AJ, Deasy JO, Tannenbaum AR, 2022. Long-term p21 and p53 dynamics regulate the frequency of mitosis events and cell cycle arrest following radiation damage. *Cell Death Differ* .
<https://doi.org/10.1038/s41418-022-01069-x>
554. Mikhaylov, V., Levine, A.J. Accurate modeling of peptide-MHC structures with AlphaFold bioRxiv [Preprint]. 2023.03.06.531396; doi: <https://doi.org/10.1101/2023.03.06.531396>
555. de Andrade KC, Strande NT, Kim J, Haley JS, Hatton JN, Frone MN, Khincha PP, Thone GM, Mirshahi UL, Schneider C, Desai H, Dove JT, Smelser DT, Penn Medicine BioBank, Regeneron Genetics Center, Levine AJ, Maxwell KN, Stewart DR, Carey DJ, Savage SA. Genome-First Approach of the Prevalence and Cancer Phenotypes of Pathogenic or Likely Pathogenic Germline TP53 Variants. *Human Genetics and Genomics Advances* (2023). doi: <https://doi.org/10.1016/j.xhgg.2023.100242>
556. Jef D. Boeke, Kathleen H. Burns, Katherine B. Chiappinelli, Marie Classon, John M. Coffin, Daniel D. DeCarvalho, Joseph D. Dukes, Benjamin Greenbaum, George Kassiotis, Sarah K. Knutson, Arnold J. Levine, Avindra Nath, Sophie Papa, Daniel Rios, John Sedivy, and David T. Ting. Proceedings of the inaugural Dark Genome Symposium: November 2022. *Mobile DNA* (2023) 14:18 <https://doi.org/10.1186/s13100-023-00306-5>
557. Levine, A.J., Carpten, J.D., Murphy, M. *et al.* Exploring the genetic and molecular basis of differences in multiple myeloma of individuals of African and European descent. *Cell Death Differ* (2023). <https://doi.org/10.1038/s41418-023-01236-8>
558. Gomez, K., Schiavoni, G., Nam, Y., Reynier, J., Khamnei, C., Aitken, M., Palmieri, G., Cossu, A., Levine, A., van Noesel, C., Falini, B., Pasqualucci, L., Tiacci, E., Rabadan, R. Genomic landscape of virus-associated cancers medRxiv [Preprint] 2023.02.14.23285775; doi: <https://doi.org/10.1101/2023.02.14.23285775>
559. Levine AJ, 2024. Improving T cell killing and understanding senescence: Possible roles for TP53 in cancer immunotherapy. *Proceedings of the National Academy of Sciences* 121(12). <https://doi.org/10.1073/pnas.2402533121>
560. Pedro A. F. Galante, Gabriela D. A. Guardia, , Janina Pisani, Renata L. Sandoval, Mateus C. Barros-Filho, Ana Carolina Leite, Vieira Costa Gifoni, Diogo F. C. Patrão, Patricia Ashton-Prolla, Vitor Fiorin de Vasconcellos, Claire Freycon, Arnold Levine, Pierre Hainaut, Maria Isabel Achatz. Tumor Spectrum and Temporal Cancer Trends in adult carriers of Li-Fraumeni syndrome: Implications for Personalized Screening Strategies in TP53 R337H carriers. *Lancet Oncology* (2024). <https://dx.doi.org/10.2139/ssrn.4781290>
561. Montellier, E., Lemonnier, N., Penkert, J., Freycon, C., Blanchet, S., Amadou, A., Chuffart, F., Fischer, N.W., Achatz, M., Levine, A.J., Goudie, C., Malkin, D., Bougeard, G., Kratz, C.P., Hainaut, P. Clustering of TP53 variants into functional classes correlates with cancer risk and identifies different phenotypes of Li-Fraumeni syndrome. *iScience*, Volume 27, Issue 12, 2024, 111296. ISSN 2589-0042, <https://doi.org/10.1016/j.isci.2024.111296>

562. Carter, B.Z., Mak, P.Y., Ke, B., Wu, X., Boettcher, S., Ostermann, L.B., Bedoy, A., Gener-Ricos, G., Senapati, J., DiNardo, C.D., Puzio-Kuter, A., Levine, A., Andreeff, M. Reactivation of p53 in TP53-Y220C Mutant AML: Mechanism of Action and Mechanism-Based Drug Combinations. *Blood* 2024; 144 (Supplement 1): 4155. doi: <https://doi.org/10.1182/blood-2024-208403>
563. Poyurovsky, M., Puzio-Kuter, A., Xu, L., Schram, A.M., McBrayer, M., Dominique, R., Li, H., Fahr, B., Brown, A., Wiebesiek, A., Russo, B., Mulligan, C., Yang, H., Battaglia, J., Robell, K., Thomas, D., Dr. Huang, K., Solovyov, A., Greenbaum, B.D., Oliner, J.D., Davis, T., Dumble, M., Johnson, M.L., Xiong, S., Yang, P., Lozano, G., Fellous, M., Vu, B., Levine, A.J. Restoration of the Tumor Suppressor Function of Y220C-Mutant p53 by Rezatapopt, a Small Molecule Reactivator. *Cancer Discovery* (2025) (in print). ISSN 2159-8274. <https://doi.org/10.1158/2159-8290.CD-24-1421>
564. Puzio-Kuter, A.M., Xu, L., McBrayer, M.K., Dominique, R., Li, H.H., Fahr, B.J., Brown, A.M., Wiebesiek, A.E., Russo, B.M., Mulligan, C.L., Yang, H., Battaglia, J., Robell, K.A., Thomas, D.H., Huang, K.S., Solovyov, A., Greenbaum, B.D., Oliner, J.D., Davis, T.W., Dumble, M.L., Johnson, M.L., Xiong, S., Yang, P., Lozano, G., Fellous, M.M., Vu, B.T., Schram, A.M., Levine, A.J., Poyurovsky, M.V. Restoration of the Tumor Suppressor Function of Y220C-Mutant p53 by Rezatapopt, a Small-Molecule Reactivator. *Cancer Discov.* 2025 Jun 3;15(6):1159-1179. doi: 10.1158/2159-8290.CD-24-1421. PMID: 39945593; PMCID: PMC12130801.
565. Carter, B.Z., Mak, P. Y., Ayoub, E., Wu, X., Baozhen, K., Nishida, Y., Futreal, A., Ostermann, L., Bedoy, A., Boettcher, S., DiNardo, C.D., Puzio-Kuter, A., Poyurovsky, M., Levine, A., Andreeff, M. Restoring p53-wild type conformation in TP53-Y220C mutant acute myeloid leukemia. *Blood*. 2025 Nov 20;146(21):2574-2588. doi: 10.1182/blood.2025028935. PMID: 40608889; PMCID: PMC12320512.
566. Rabadan, R., Nam, Y., Gomez, K., Reynier, J., Khamnei, C., Aitken, M., Zheng, V., Lhakhang, T., Casula, M., Palmieri, G., Cossu, A., Levine, A., Tiacci, E. Genomic landscape of virus-associated cancers. *Nature* (in print).
567. Montellier, E., Manches, O., Gaucher, J., Blanchet, S., Hoyos, D., Verboom, M., Dutzmann, C.M., Coutant, S., Bou, J., Fin, B., Olaso, R., Deleuze, J.-F., Frebourg, T., Greenbaum, B.D., Levine, A.J., Kratz, C.P., Bougeard, G., Hainaut, P. Neoantigenic properties of TP53 variants modify cancer risk in individuals with Li-Fraumeni syndrome. *eBioMedicine*, 123:106065, 2026. doi: <https://doi.org/10.1101/2025.06.24.25328545>