

Peter R. Shank Publications

Peer reviewed:

1. Varmus, H.E. and **P.R. Shank**, 1976, Unintegrated viral DNA is synthesized in the cytoplasm of avian sarcoma virus-transformed duck cells by viral DNA polymerase. *J. Virol.* 18: 567-573.
2. Guntaka, R.V., O.C. Richards, **P.R. Shank**, J.H. Kung, N. Davidson, E. Fritsch, J.M. Bishop and H.E. Varmus, 1976, Covalently closed circular DNA of avian sarcoma virus: purification from the nuclei of infected quail tumor cells and measurement by electron microscopy and gel electrophoresis. *J. Mol. Biol.* 106: 337-357.
3. Ringold, G.M., K.R. Yamamoto, **P.R. Shank** and H.E. Varmus, 1977, Mouse mammary tumor virus DNA in infected rat cells: characterization of unintegrated forms. *Cell* 10: 19-26.
4. **Shank, P.R.**, C.A. Hutchison III and M.H. Edgell, 1977, Isolation and characterization of the four major proteins of the virion of bacteriophage Φ X-174. *Biochemistry* 16: 4545-4549.
5. Freymeyer, D.K. II, **P.R. Shank**, C.A. Hutchison III, M.H. Edgell and T.C. Vanaman, 1977, The amino acid sequence of the small core protein of bacteriophage Φ X-174. *Biochemistry* 16: 4550-4556.
6. **Shank, P.R.** and H.E. Varmus, 1978, Virus-specific DNA in the cytoplasm of avian sarcoma virus-infected cells is precursor to covalently closed circular viral DNA in the nucleus. *J. Virol.* 25: 104-114.
7. **Shank, P.R.**, J.C. Cohen, H.E. Varmus, K.R. Yamamoto and G.M. Ringold, 1978, Mapping of linear and circular forms of mouse mammary tumor virus DNA with restriction endonucleases: evidence for a large specific deletion occurring at high frequency during circularization. *Proc. Natl. Acad. Sci. USA* 75: 2112-2116.
8. Swanstrom, R. and **P.R. Shank**, 1978, X-ray intensifying screens greatly enhance the detection by autoradiography of the radioactive isotopes ^{32}P and ^{125}I . *Anal. Biochem.* 86: 184-192.
9. Ringold, G.M., **P.R. Shank** and K.R. Yamamoto, 1978, Production of unintegrated mouse mammary tumor virus DNA in the infected rat hepatoma cells is a secondary action of dexamethasone. *J. Virol.* 26: 93-101.
10. Varmus, H.E., S. Heasley, H.J. Kung, H. Oppermann, V.C. Smith, J.M. Bishop and **P.R. Shank**, 1978, Kinetics of synthesis, structure and purification of avian

sarcoma virus-specific DNA made in the cytoplasm of acutely-infected cells. *J. Mol. Biol.* 120: 55-82.

11. Ringold, G.M., J.C. Cohen, J. Ring, **P.R. Shank**, H.E. Varmus and K.R. Yamamoto, 1978, Mouse mammary tumor virus genes regulation of expression by glucocorticoids and structural analysis with restriction endonucleases. *J. Tox. and Env. Health* 4: 457-470.
12. **Shank, P.R.**, S.H. Hughes, H.J. Kung, J.E. Majors, N. Quintrell, R.V. Guntaka, J.M. Bishop and H.E. Varmus, 1978, Mapping unintegrated forms of avian sarcoma virus DNA: both termini of linear DNA bear a 300 nucleotide sequence present once or twice in two species of circular DNA. *Cell* 15: 1383-1395.
13. Hughes, S.H., **P.R. Shank**, D.H. Spector, H.J. Kung, J.M. Bishop, H.E. Varmus, P.K. Vogt and M.L. Breitman, 1978, Proviruses of avian sarcoma virus are terminally redundant, coextensive with unintegrated linear DNA and integrated at many sites in rat cell DNA. *Cell* 15: 1397-1410.
14. Cohen, J.C., **P.R. Shank**, V.L. Morris, R. Cardiff and H.E. Varmus, 1979, Integration of the DNA of mouse mammary tumor virus in virus-infected normal and neoplastic tissue of the mouse. *Cell* 16: 333-345.
15. Ringold, G.M., **P.R. Shank** and K.R. Yamamoto, 1979, Integration and transcription of mouse mammary tumor virus DNA in rat hepatoma cells. *Proc. Natl. Acad. Sci. USA* 76: 665-669.
16. Morris, V.L., C. Kozak, J.C. Cohen, **P.R. Shank**, P. Jolicour, F. Ruddle and H.E. Varmus, 1979, Endogenous mouse mammary tumor virus is distributed among multiple chromosomes. *Virology* 92: 46-55.
17. Varmus, H.E., **P.R. Shank**, S.H. Hughes, H.J. Kung, S. Heasley, J. Majors, P.K. Vogt and J.M. Bishop, 1979, Structures of unintegrated and integrated forms of the DNA of RNA tumor viruses. *Symp. of Biochemical Soc., Biochemistry of Genetic Engineering* 44: 104-118.
18. Kung, H.J., **P.R. Shank**, J.M. Bishop and H.E. Varmus, 1980, Identification and characterization of dimeric and trimeric circular forms of avian sarcoma virus-specific DNA. *Virology* 103: 425-433.
19. **Shank, P.R.** and M. Linial, 1980, An avian oncovirus mutant (SE21Q1b) deficient in genomic RNA: evidence for a small deletion in the genome. *J. Virol.* 36: 450-456.
20. **Shank, P.R.**, S.H. Hughes and H.E. Varmus, 1981, The restriction endonuclease fragment map of RAV-O DNA indicates extensive homology with ASV and

the presence of a 300 base pair direct terminal repeat. *Virology* 108: 177-188.

21. Robinson, H.L., J.M. Coffin, P.N. Tsiichlis, **P.R. Shank**, P. Schatz and L. Jensen, 1982, Cancer induction by insertional mutagenesis: the role of viral genes in avian virus induced cancers. *Prog. in Clinical and Biological Res.* 119: 37-42.
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23. Goyette, M., C.J. Petropoulos, **P.R. Shank** and N. Fausto, 1983, Expression of a cellular oncogene during liver regeneration. *Science* 219: 510-512.
24. Fausto, N. and **P.R. Shank**, 1983, Oncogene expression in liver regeneration and hepatocarcinogenesis. *Hepatology* 3: 1016-1023.
25. Goyette, M., C.J. Petropoulos, **P.R. Shank** and N. Fausto, 1984, Regulated transcription of c-Ki-ras and c-myc during compensatory growth of rat liver. *Mol. and Cell. Biol.* 4: 1493-1498.
26. Yaswen, P., M. Goyette, **P.R. Shank** and N. Fausto, 1985, Expression of c-Ki-ras, c-Ha-ras, and c-myc in specific cell types during hepatocarcinogenesis. *Mol. Cell Biol.* 5: 780-786.
27. **Shank, P.R.**, P.J. Schatz, P.N. Tsiichlis, J.M. Coffin, L. Jensen and H.L. Robinson, 1985, Sequences in the gag-pol-5'env region of avian leukosis viruses confer the ability to induce osteopetrosis. *Virology* 145: 94-104.
28. Leamnson, R.N. and **P.R. Shank**, 1986, Nucleotide sequence comparison of avian retroviruses NY203 and NTRE-2. *Virology* 151: 139-145.
29. Thompson, N.L., J.E. Mead, L. Braun, M. Goyette, **P.R. Shank** and N. Fausto, 1986, Sequential proto-oncogene expression during rat liver regeneration. *Cancer Res.* 46: 3111-3117.
30. Robinson, H.L., S.S. Reinsch, and **P.R. Shank**, 1986, Sequences near the 5' end of avian leukosis viruses determine the ability to induce osteopetrosis. *J. Virol.* 59: 45-49.
31. Fausto, N., J.E. Mead, L. Braun, N.L. Thompson, M. Panzica, M. Goyette, G.I. Bell and **P.R. Shank**, 1987, Proto-oncogene expression and growth factors during liver regeneration. *Symp. on Fund. Cancer Res.* Vol. 39: 69-86.

32. Goyette, M., M. Dolan, W. Kaufmann, D. Kaufman, **P.R. Shank** and N. Fausto, 1988, Transforming activity of DNA from rat liver tumors induced by the carcinogen methyl(acetoxymethyl)nitrosamine. *Mol. Carcinogenesis* 1: 26-32.
33. Jeang, K.-T., **P.R. Shank**, A.B. Rabson and A. Kumar, 1988, Synthesis of functional human immunodeficiency virus *tat* protein in baculovirus as determined by a cell-cell fusion assay. *J. Virol.* 62: 3874-3878.
34. Jeang, K.-T., **P.R. Shank** and A. Kumar, 1988, Transcriptional activation of homologous viral LTR by the HIV-1 or the HTLV-1 *tat* proteins occurs in the absence of *de novo* Protein synthesis. *Proc. Natl. Acad. Sci. USA*, 85: 8291-8295.
35. Hanes, S.D., **P.R. Shank** and K.R. Bostian, 1989, Sequence and mutational analysis of ESS1, a gene essential for growth in *saccharomyces cerevisiae*. *Yeast* 5: 55-72.
36. Chatterjee, D., A. Mendelsohn, **P.R. Shank** and T.M. Savarese, 1989, Reversible suppression of c-*myc* expression in a human colon carcinoma line by the anticancer agent N-methylfromamide. *Cancer Res.* 49: 3910-3915.
37. Newstein, M., E.J. Stanbridge, G. Casey and **P.R. Shank**, 1990, Human chromosome 12 Encodes a species-specific factor which increases human immunodeficiency virus type 1 *Tat*-mediated *trans*-activation in rodent cells. *J. Virol.* 64: 4565-4567.
38. Anderson, D.J., P. Lee, K.L. Levine, J. Sang, S. A. Shah, O.O. Yang, **P.R. Shank** and M. Linial, 1991, Molecular cloning and characterization of the RNA packaging-defective retrovirus SE21Q1b. *J. Virol.* 66: 204-216.
39. Robinson, H.L., R.G. Foster, B.P. Blais, S.S. Reinsch, M. Newstein and **P.R. Shank**, 1992, 5' Avian Leukosis Virus Sequences and Osteopetrotic Potential. *Virology*, 190: 866-871.
40. Han, X.-M., A. Laras, M.P. Rounseville, A. Kumar and **P.R. Shank**, 1992, HIV-1 *tat* gene *trans*-activation correlates with the phosphorylation state of a cellular TAR RNA stem-binding factor. *J. Virol.* 66: 4065-4072.
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42. Sears, W.S., Goto-Mandeville R., Shih, H.A., **P.R. Shank** and L. Braun, 1997, Molecular Analysis of Episomal Human Papillomavirus Type 16 DNA in a Cervical Carcinoma Cell Line. *Virus Res.* 51: 183-195.

42. Wagner, E.F., N. Hanna, L.D. Fast, N. Kouttab, **P.R. Shank**, A. Vazquez and S. Sharma, 2000, Novel Diversity in IL-4-Mediated Responses in Resting Human naïve B Cells versus Germinal Center B Cells. *J. Immunol.* 165: 5573-5579 .
43. Desilva, F. S., D. Venturini, E. Wagner, **P.R. Shank** and S. Sharma, 2001, Chronic CD4-Independent Infection of Human B Cells by HIV-1: Detection of Unintegrated Viral DNA. *AIDS Res. and Human Retrovir.* 17: 1585-1598.
44. Fleming, S.L., **P.R. Shank**, and K. Boekelheide, 2003, gamma-Tubulin overexpression in Sertoli cells in vivo: I. Localization to sites of spermatid head attachment and alterations in Sertoli cell microtubule distribution. *Biol. Reprod.* 69: 310-321.
45. 46. Fleming, S.L., **P.R. Shank**, and K. Boekelheide, 2003, gamma-Tubulin overexpression in Sertoli cells in vivo. II: Retention of spermatids, residual bodies, and germ cell apoptosis. *Biol. Reprod.* 69: 322-330.
46. Boden, D., Push, O., Lee, F., Tucker, L., **Shank, P.R.**, and B. Raratram, 2003, Promoter choice affects the potency of HIV-1 specific RNA interference, *Nucl. Acids Res.* 17:5033-8.

Invited articles, chapters and other:

1. Varmus, H.E., **P.R. Shank**, H.J. Kung, R.V. Guntaka, O.C. Richards and J.M. Bishop, 1977, Mechanism of synthesis and persistence of virus-specific DNA in cells infected by RNA tumor viruses. *Microbiology* 1977, ed. D. Schlessinger, 470-472.
2. Varmus, H.E., **P.R. Shank**, H.J. Kung, R.V. Guntaka, O.C. Richards and J.M. Bishop, 1978, Mechanism of synthesis and persistence of virus-specific DNA in cells infected by RNA tumor viruses. *Proc. of the Mossbach Colloquium*. Springer-Verlag.
3. Varmus, H.E., J.C. Cohen, **P.R. Shank**, G.M. Ringold, K.R. Yamamoto, R.D. Cardiff and V.L. Morris, 1978, The endogenous and acquired proviruses of mouse mammary tumor virus. ICN-UCLA Symposium on Molecular and Cellular Biology XI, *Persistent Viruses*, eds. J.G. Stevens, G.J. Todaro and C.F. Fox, 161-179.
4. Varmus, H.E., **P.R. Shank**, S.H. Hughes, H.J. Kung, S. Heasley, J. Majors, P.K. Vogt and J.M. Bishop, 1979, Synthesis, structure and integration of the DNA of RNA tumor viruses. *Cold Spring Harbor Symp. on Quant. Biol.*, XLIII, 851-864.

5. Fausto, N. and **P.R. Shank**, 1987, Analysis of proto-oncogene expression during liver regeneration and hepatic carcinogenesis. In *Neoplasms of the Liver*, Okuda, K. and K.G. Ishaki, eds. Springer-Verlag, 57-77.
6. Arnoff, R., K. Levine, B. Steiner, S. Shah, **P. Shank**, and M. Linial, 1988, Retrofection: reverse transcription and integration of nonretroviral RNAs after viral infection. In *Current Communications in Molecular Biology*, Y. Gluzman and S.H. Hughes, eds. Cold Spring Harbor, 146-152.
7. Linial, M.L., R. Arnoff, K. Johnson, K.L. Levine, B. Steiner, S. Shah, O. Yang and **P.R. Shank**, 1989, Retroviral Mediated Transfer of cellular genes. In *Highlights of Modern Biochemistry*, A. Kotyk, J. Skoda, Z. Paces, Z. Kaftka, eds. ZSP International Science Publishers, 583-591.
8. Kumar, A., A. Gagnol, K-T. Jeang, A.B Rabson, M. Newstein and **P.R. Shank**, 1990, The role of cellular factors in *Tat*-mediated *trans*-activation. In *Gene Regulation, Oncogenesis and AIDS*, T. Papas editor, Portfolio Publishing, Woodland Texas, 161-183.
9. Newstein, M., and **P.R. Shank**, 1991, Human-specific factors are required for *Tat*-mediated *trans*-activation of the HIV-1 and HIV-2 LTRs, In *Advances in Molecular Biology and Targeted Treatments for AIDS*, A. Kumar, editor, Plenum Press, New York, N.Y., 69-77.
10. **Shank, Peter R.**, 1993 Good Health Care Depends on Research. Op. Ed. *Providence Journal* October 3, 1993.
11. Newstein, M. and **P.R. Shank** 1994, Transient Transfection Studies to Characterize HIV *Tat* Transactivation. In *Methods in Molecular Genetics*, K.W. Adolph editor, Academic Press, Orlando FL, 56-68.