

## References

1. Cui, Y., Hagan, K. W., Zhang, S. & Peltz, S. W. (1995) Identification and characterization of genes that are required for the accelerated degradation of mRNAs containing a premature translational termination codon, *Genes Dev.* 9, 423-36.
2. He, F. & Jacobson, A. (1995) Identification of a novel component of the nonsense-mediated mRNA decay pathway by use of an interacting protein screen, *Genes Dev.* 9, 437-54.
3. Lee, B. S. & Culbertson, M. R. (1995) Identification of an additional gene required for eukaryotic nonsense mRNA turnover, *Proc Natl Acad Sci U S A.* 92, 10354-8.
4. Leeds, P., Peltz, S. W., Jacobson, A. & Culbertson, M. R. (1991) The product of the yeast UPF1 gene is required for rapid turnover of mRNAs containing a premature translational termination codon, *Genes Dev.* 5, 2303-14.
5. Leeds, P., Wood, J. M., Lee, B. S. & Culbertson, M. R. (1992) Gene products that promote mRNA turnover in *Saccharomyces cerevisiae*, *Mol Cell Biol.* 12, 2165-77.
6. Lelivelt, M. J. & Culbertson, M. R. (1999) Yeast Upf proteins required for RNA surveillance affect global expression of the yeast transcriptome, *Mol Cell Biol.* 19, 6710-9.
7. Culbertson, M. R. (1999) RNA surveillance. Unforeseen consequences for gene expression, inherited genetic disorders and cancer, *Trends Genet.* 15, 74-80.
8. Dahlseid, J. N., Puziss, J., Shirley, R. L., Atkin, A. L., Hieter, P. & Culbertson, M. R. (1998) Accumulation of mRNA coding for the ctf13p kinetochore subunit of *Saccharomyces cerevisiae* depends on the same factors that promote rapid decay of nonsense mRNAs, *Genetics.* 150, 1019-35.
9. Doheny, K. F., Sorger, P. K., Hyman, A. A., Tugendreich, S., Spencer, F. & Hieter, P. (1993) Identification of essential components of the *S. cerevisiae* kinetochore, *Cell.* 73, 761-74.
10. Lechner, J. & Carbon, J. (1991) A 240 kd multisubunit protein complex, CBF3, is a major component of the budding yeast centromere, *Cell.* 64, 717-25.
11. Connelly, C. & Hieter, P. (1996) Budding yeast SKP1 encodes an evolutionarily conserved kinetochore protein required for cell cycle progression, *Cell.* 86, 275-85.
12. Lechner, J. (1994) A zinc finger protein, essential for chromosome segregation, constitutes a putative DNA binding subunit of the *Saccharomyces cerevisiae* kinetochore complex, *Cbf3*, *Embo J.* 13, 5203-11.
13. Stemmann, O. & Lechner, J. (1996) The *Saccharomyces cerevisiae* kinetochore contains a cyclin-CDK complexing homologue, as identified by in vitro reconstitution, *Embo J.* 15, 3611-20.
14. Strunnikov, A. V., Kingsbury, J. & Koshland, D. (1995) CEP3 encodes a centromere protein of *Saccharomyces cerevisiae*, *J Cell Biol.* 128, 749-60.
15. Lew, J. E., Lelivelt, M. J., Dahlseid, J. N., Enomoto, S., McClellan, M., Williams, A., Johnson, S., Culbertson, M. R. & Berman, J. (2000) In preparation.
16. Beelman, C. A. & Parker, R. (1995) Degradation of mRNA in eukaryotes, *Cell.* 81, 179-83.
17. Decker, C. J. & Parker, R. (1994) Mechanisms of mRNA degradation in eukaryotes, *Trends Biochem Sci.* 19, 336-40.
18. Muhrad, D. & Parker, R. (1994) Premature translational termination triggers mRNA decapping, *Nature.* 370, 578-81.
19. Maquat, L. E. (1995) When cells stop making sense: effects of nonsense codons on RNA metabolism in vertebrate cells, *Rna.* 1, 453-65.
20. Ross, J. (1995) mRNA stability in mammalian cells, *Microbiol Mol Biol Rev.* 59, 423-450.
21. Sporn, M. B. & Roberts, A. B. (1985) Autocrine growth factors and cancer, *Nature.* 313, 745-7.
22. Lindstein, T., June, C. H., Ledbetter, J. A., Stella, G. & Thompson, C. B. (1989) Regulation of lymphokine messenger RNA stability by a surface-mediated T cell activation pathway, *Science.* 244, 339-43.
23. Aviv, H., Voloch, Z., Bastos, R. & Levy, S. (1976) Biosynthesis and stability of globin mRNA in cultured erythroleukemic Friend cells, *Cell.* 8, 495-503.
24. Krowczynska, A., Yenofsky, R. & Brawerman, G. (1985) Regulation of messenger RNA stability in mouse erythroleukemia cells, *J Mol Biol.* 181, 231-9.
25. Bastos, R. N. & Aviv, H. (1977) Theoretical analysis of a model for globin messenger RNA accumulation during erythropoiesis, *J Mol Biol.* 110, 205-18.
26. Alterman, R. B., Ganguly, S., Schulze, D. H., Marzluff, W. F., Schildkraut, C. L. & Skoultchi, A. I. (1984) Cell cycle regulation of mouse H3 histone mRNA metabolism, *Mol Cell Biol.* 4, 123-32.

27. Marzluff, W. F. & Hanson, R. J. (1993) in *Control of Messenger RNA Stability* (Brawerman, G. & Belasco, J., eds) pp. 267-290, Academic Press, Inc., San Diego, CA.
28. Harris, M. E., Bohni, R., Schneiderman, M. H., Ramamurthy, L., Schumperli, D. & Marzluff, W. F. (1991) Regulation of histone mRNA in the unperturbed cell cycle: evidence suggesting control at two posttranscriptional steps, *Mol Cell Biol.* 11, 2416-24.
29. Marzluff, W. F. (1992) Histone 3' ends: essential and regulatory functions, *Gene Expr.* 2, 93-7.
30. Graves, R. A., Pandey, N. B., Chodchoy, N. & Marzluff, W. F. (1987) Translation is required for regulation of histone mRNA degradation, *Cell.* 48, 615-26.
31. Ross, J., Peltz, S. W., Kobs, G. & Brewer, G. (1986) Histone mRNA degradation in vivo: the first detectable step occurs at or near the 3' terminus, *Mol Cell Biol.* 6, 4362-71.
32. Ross, J. & Kobs, G. (1986) H4 histone messenger RNA decay in cell-free extracts initiates at or near the 3' terminus and proceeds 3' to 5', *J Mol Biol.* 188, 579-93.
33. Hereford, L., Bromley, S. & Osley, M. A. (1982) Periodic transcription of yeast histone genes, *Cell.* 30, 305-10.
34. Hereford, L. M., Osley, M. A., Ludwig, T. R. d. & McLaughlin, C. S. (1981) Cell-cycle regulation of yeast histone mRNA, *Cell.* 24, 367-75.
35. Caponigro, G. & Parker, R. (1996) Mechanisms and control of mRNA turnover in *Saccharomyces cerevisiae*, *Microbiol Rev.* 60, 233-49.
36. Jacobs, J. S., Anderson, A. R. & Parker, R. P. (1998) The 3' to 5' degradation of yeast mRNAs is a general mechanism for mRNA turnover that requires the SKI2 DEVH box protein and 3' to 5' exonucleases of the exosome complex, *Embo J.* 17, 1497-506.
37. Sachs, A. B. & Davis, R. W. (1989) The poly(A) binding protein is required for poly(A) shortening and 60S ribosomal subunit-dependent translation initiation, *Cell.* 58, 857-67.
38. Brown, C. E., Tarun, S. Z., Jr., Boeck, R. & Sachs, A. B. (1996) PAN3 encodes a subunit of the Pab1p-dependent poly(A) nuclease in *Saccharomyces cerevisiae*, *Mol Cell Biol.* 16, 5744-53.
39. Boeck, R., Tarun, S., Jr., Rieger, M., Deardorff, J. A., Muller-Auer, S. & Sachs, A. B. (1996) The yeast Pan2 protein is required for poly(A)-binding protein- stimulated poly(A)-nuclease activity, *J Biol Chem.* 271, 432-8.
40. Lowell, J. E., Rudner, D. Z. & Sachs, A. B. (1992) 3'-UTR-dependent deadenylation by the yeast poly(A) nuclease, *Genes Dev.* 6, 2088-99.
41. Decker, C. J. & Parker, R. (1993) A turnover pathway for both stable and unstable mRNAs in yeast: evidence for a requirement for deadenylation, *Genes Dev.* 7, 1632-43.
42. Muhlrads, D., Decker, C. J. & Parker, R. (1994) Deadenylation of the unstable mRNA encoded by the yeast MFA2 gene leads to decapping followed by 5'-->3' digestion of the transcript, *Genes Dev.* 8, 855-66.
43. Muhlrads, D., Decker, C. J. & Parker, R. (1995) Turnover mechanisms of the stable yeast PGK1 mRNA, *Mol Cell Biol.* 15, 2145-56.
44. Beelman, C. A., Stevens, A., Caponigro, G., LaGrandeur, T. E., Hatfield, L., Fortner, D. M. & Parker, R. (1996) An essential component of the decapping enzyme required for normal rates of mRNA turnover [see comments], *Nature.* 382, 642-6.
45. LaGrandeur, T. E. & Parker, R. (1998) Isolation and characterization of Dcp1p, the yeast mRNA decapping enzyme, *Embo J.* 17, 1487-96.
46. Dunckley, T. & Parker, R. (1999) The DCP2 protein is required for mRNA decapping in *Saccharomyces cerevisiae* and contains a functional MutT motif, *Embo J.* 18, 5411-22.
47. Caponigro, G. & Parker, R. (1995) Multiple functions for the poly(A)-binding protein in mRNA decapping and deadenylation in yeast, *Genes Dev.* 9, 2421-32.
48. Hatfield, L., Beelman, C. A., Stevens, A. & Parker, R. (1996) Mutations in trans-acting factors affecting mRNA decapping in *Saccharomyces cerevisiae*, *Mol Cell Biol.* 16, 5830-8.
49. Boeck, R., Lapeyre, B., Brown, C. E. & Sachs, A. B. (1998) Capped mRNA degradation intermediates accumulate in the yeast *spb8-2* mutant, *Mol Cell Biol.* 18, 5062-72.
50. Zhang, S., Williams, C. J., Hagan, K. & Peltz, S. W. (1999) Mutations in VPS16 and MRT1 stabilize mRNAs by activating an inhibitor of the decapping enzyme, *Mol Cell Biol.* 19, 7568-76.
51. Tharun, S., He, W., Mayes, A. E., Lennertz, P., Beggs, J. D. & Parker, R. (2000) Yeast Sm-like proteins function in mRNA decapping and decay, *Nature.* 404, 515-8.
52. Larimer, F. W. & Stevens, A. (1990) Disruption of the gene XRN1, coding for a 5'----3' exoribonuclease, restricts yeast cell growth, *Gene.* 95, 85-90.
53. Stevens, A. (1993) in *Control of Messenger RNA Stability* (Brawerman, G. & Belasco, J., eds) pp. 449-469, Academic Press, San Diego.
54. Wells, S. E., Hillner, P. E., Vale, R. D. & Sachs, A. B. (1998) Circularization of mRNA by

eukaryotic translation initiation factors, *Mol Cell*. 2, 135-40.

55. Sachs, A. B., Sarnow, P. & Hentze, M. W. (1997) Starting at the beginning, middle, and end: translation initiation in eukaryotes, *Cell*. 89, 831-8.
56. Jacobson, A. (1995) Poly(A) metabolism and translation: The closed loop model in *Translational Control* (Hershey, J., Mathews, M. & Sonenberg, N., eds) pp. 451-480, Cold Spring Harbor Press, 1995, Cold Spring Harbor, N.Y.
57. Sachs, A. B., Davis, R. W. & Kornberg, R. D. (1987) A single domain of yeast poly(A)-binding protein is necessary and sufficient for RNA binding and cell viability, *Mol Cell Biol*. 7, 3268-76.
58. Brown, J. T., Yang, X. & Johnson, A. W. (2000) Inhibition of mRNA turnover in yeast by an *xrn1* mutation enhances the requirement for eIF4E binding to eIF4G and for proper capping of transcripts by *ceg1p*, *Genetics*. 155, 31-42.
59. Schwartz, D. C. & Parker, R. (1999) Mutations in translation initiation factors lead to increased rates of deadenylation and decapping of mRNAs in *Saccharomyces cerevisiae*, *Mol Cell Biol*. 19, 5247-56.
60. Hilleren, P. & Parker, R. (1999) Mechanisms of mRNA surveillance in eukaryotes, *Annu Rev Genet*. 33, 229-60.
61. He, F., Peltz, S. W., Donahue, J. L., Rosbash, M. & Jacobson, A. (1993) Stabilization and ribosome association of unspliced pre-mRNAs in a yeast *upf1*- mutant, *Proc Natl Acad Sci U S A*. 90, 7034-8.
62. Pulak, R. & Anderson, P. (1993) mRNA surveillance by the *Caenorhabditis elegans* *smg* genes, *Genes Dev*. 7, 1885-97.
63. Cali, B. M. & Anderson, P. (1998) mRNA surveillance mitigates genetic dominance in *Caenorhabditis elegans*, *Mol Gen Genet*. 260, 176-84.
64. Losson, R. & Lacroute, F. (1979) Interference of nonsense mutations with eukaryotic messenger RNA stability, *Proc Natl Acad Sci U S A*. 76, 5134-7.
65. Hagan, K. W., Ruiz-Echevarria, M. J., Quan, Y. & Peltz, S. W. (1995) Characterization of cis-acting sequences and decay intermediates involved in nonsense-mediated mRNA turnover, *Mol Cell Biol*. 15, 809-23.
66. Peltz, S. W., Brown, A. H. & Jacobson, A. (1993) mRNA destabilization triggered by premature translational termination depends on at least three cis-acting sequence elements and one trans-acting factor, *Genes Dev*. 7, 1737-54.
67. Zhang, S., Ruiz-Echevarria, M. J., Quan, Y. & Peltz, S. W. (1995) Identification and characterization of a sequence motif involved in nonsense-mediated mRNA decay, *Mol Cell Biol*. 15, 2231-44.
68. Nagy, E. & Maquat, L. E. (1998) A rule for termination-codon position within intron-containing genes: when nonsense affects RNA abundance, *Trends Biochem Sci*. 23, 198-9.
69. Perlick, H. A., Medghalchi, S. M., Spencer, F. A., Kendzior, R. J., Jr. & Dietz, H. C. (1996) Mammalian orthologues of a yeast regulator of nonsense transcript stability, *Proc Natl Acad Sci U S A*. 93, 10928-32.
70. Sun, X., Perlick, H. A., Dietz, H. C. & Maquat, L. E. (1998) A mutated human homologue to yeast *Upf1* protein has a dominant-negative effect on the decay of nonsense-containing mRNAs in mammalian cells, *Proc Natl Acad Sci U S A*. 95, 10009-14.
71. Cali, B. M., Kuchma, S. L., Latham, J. & Anderson, P. (1999) *smg-7* is required for mRNA surveillance in *Caenorhabditis elegans*, *Genetics*. 151, 605-16.
72. Page, M. F., Carr, B., Anders, K. R., Grimson, A. & Anderson, P. (1999) SMG-2 is a phosphorylated protein required for mRNA surveillance in *Caenorhabditis elegans* and related to *Upf1p* of yeast, *Mol Cell Biol*. 19, 5943-51.
73. Applequist, S. E., Selg, M., Raman, C. & Jack, H. M. (1997) Cloning and characterization of HUPF1, a human homolog of the *Saccharomyces cerevisiae* nonsense mRNA-reducing UPF1 protein, *Nucleic Acids Res*. 25, 814--21.
74. Atkin, A. L., Schenkman, L. R., Eastham, M., Dahlseid, J. N., Lelivelt, M. J. & Culbertson, M. R. (1997) Relationship between yeast polyribosomes and *Upf* proteins required for nonsense mRNA decay, *J Biol Chem*. 272, 22163-72.
75. He, F., Brown, A. H. & Jacobson, A. (1997) *Upf1p*, *Nmd2p*, and *Upf3p* are interacting components of the yeast nonsense-mediated mRNA decay pathway, *Mol Cell Biol*. 17, 1580-94.
76. Atkin, A. L., Altamura, N., Leeds, P. & Culbertson, M. R. (1995) The majority of yeast UPF1 co-localizes with polyribosomes in the cytoplasm, *Mol Biol Cell*. 6, 611-25.
77. Czaplinski, K., Weng, Y., Hagan, K. W. & Peltz, S. W. (1995) Purification and characterization of the *Upf1* protein: a factor involved in translation and mRNA degradation, *Rna*. 1, 610-23.

78. Weng, Y., Czaplinski, K. & Peltz, S. W. (1996) Identification and characterization of mutations in the UPF1 gene that affect nonsense suppression and the formation of the Upf protein complex but not mRNA turnover, *Mol Cell Biol.* 16, 5491-506.
79. He, F., Brown, A. H. & Jacobson, A. (1996) Interaction between Nmd2p and Upf1p is required for activity but not for dominant-negative inhibition of the nonsense-mediated mRNA decay pathway in yeast, *Rna.* 2, 153-70.
80. Shirley, R. L., Lelivelt, M. J., Schenkman, L. R., Dahlseid, J. N. & Culbertson, M. R. (1998) A factor required for nonsense-mediated mRNA decay in yeast is exported from the nucleus to the cytoplasm by a nuclear export signal sequence, *J Cell Sci.* 111, 3129-43.
81. Zhang, S., Welch, E. M., Hogan, K., Brown, A. H., Peltz, S. W. & Jacobson, A. (1997) Polysome-associated mRNAs are substrates for the nonsense-mediated mRNA decay pathway in *Saccharomyces cerevisiae*, *Rna.* 3, 234-44.
82. Czaplinski, K., Ruiz-Echevarria, M. J., Paushkin, S. V., Han, X., Weng, Y., Perlick, H. A., Dietz, H. C., Ter-Avanesyan, M. D. & Peltz, S. W. (1998) The surveillance complex interacts with the translation release factors to enhance termination and degrade aberrant mRNAs, *Genes Dev.* 12, 1665-77.
83. Bidou, L., Stahl, G., Hutin, I., Namy, O., Rousset, J.-P. & Farabaugh, P. J. (2000) Nonsense mediated mRNA decay mutants do not affect programmed -1 frameshifting, RNA. In press.
84. Maderazo, A. B., He, F., Mangus, D. A. & Jacobson, A. (2000) Upf1p control of nonsense mRNA translation is regulated by nmd2p and upf3p [In Process Citation], *Mol Cell Biol.* 20, 4591-603.
85. Muhlrاد, D. & Parker, R. (1999) Recognition of yeast mRNAs as "nonsense containing" leads to both inhibition of mRNA translation and mRNA degradation: implications for the control of mRNA decapping, *Mol Biol Cell.* 10, 3971-8.
86. Weng, Y., Czaplinski, K. & Peltz, S. W. (1996) Genetic and biochemical characterization of mutations in the ATPase and helicase regions of the Upf1 protein, *Mol Cell Biol.* 16, 5477-90.
87. Belgrader, P., Cheng, J. & Maquat, L. E. (1993) Evidence to implicate translation by ribosomes in the mechanism by which nonsense codons reduce the nuclear level of human triosephosphate isomerase mRNA, *Proc Natl Acad Sci U S A.* 90, 482-6.
88. Belgrader, P., Cheng, J., Zhou, X., Stephenson, L. S. & Maquat, L. E. (1994) Mammalian nonsense codons can be cis effectors of nuclear mRNA half- life, *Mol Cell Biol.* 14, 8219-28.
89. Cheng, J. & Maquat, L. E. (1993) Nonsense codons can reduce the abundance of nuclear mRNA without affecting the abundance of pre-mRNA or the half-life of cytoplasmic mRNA, *Mol Cell Biol.* 13, 1892-902.
90. Peltz, S. W. & Jacobson, A. (1993) mRNA turnover in *Saccharomyces cerevisiae* in Control of Messenger RNA Stability (Brawerman, G. & Belasco, J., eds) pp. 291-327, Academic Press, San Diego.
91. Losson, R., Fuchs, R. P. & Lacroute, F. (1983) In vivo transcription of a eukaryotic regulatory gene, *Embo J.* 2, 2179-84.
92. Arima, K., Oshima, T., Kubota, I., Nakamura, N., Mizunaga, T. & Toh-e, A. (1983) The nucleotide sequence of the yeast PHO5 gene: a putative precursor of repressible acid phosphatase contains a signal peptide, *Nucleic Acids Res.* 11, 1657-72.
93. Madden, S. L., Johnson, D. L. & Bergman, L. W. (1990) Molecular and expression analysis of the negative regulators involved in the transcriptional regulation of acid phosphatase production in *Saccharomyces cerevisiae*, *Mol Cell Biol.* 10, 5950-7.
94. Ogawa, N., Saitoh, H., Miura, K., Magbanua, J. P., Bun-ya, M., Harashima, S. & Oshima, Y. (1995) Structure and distribution of specific cis-elements for transcriptional regulation of PHO84 in *Saccharomyces cerevisiae*, *Mol Gen Genet.* 249, 406-16.
95. Vogel, K., Horz, W. & Hinnen, A. (1989) The two positively acting regulatory proteins PHO2 and PHO4 physically interact with PHO5 upstream activation regions, *Mol Cell Biol.* 9, 2050-7.
96. Welch, E. M. & Jacobson, A. (1999) An internal open reading frame triggers nonsense-mediated decay of the yeast SPT10 mRNA, *Embo J.* 18, 6134-45.
97. Muhlrاد, D. & Parker, R. (1999) Aberrant mRNAs with extended 3' UTRs are substrates for rapid degradation by mRNA surveillance, *Rna.* 5, 1299-307.
98. Oliveira, C. C. & McCarthy, J. E. (1995) The relationship between eukaryotic translation and mRNA stability. A short upstream open reading frame strongly inhibits translational initiation and greatly accelerates mRNA degradation in the yeast *Saccharomyces cerevisiae*, *J Biol Chem.* 270, 8936-43.
99. Linz, B., Koloteva, N., Vasilescu, S. & McCarthy, J. E. (1997) Disruption of ribosomal scanning on the 5'-untranslated region, and not restriction of translational initiation per se,

- modulates the stability of nonaberrant mRNAs in the yeast *Saccharomyces cerevisiae*, *J Biol Chem.* 272, 9131-40.
100. Lew, J. E., Enomoto, S. & Berman, J. (1998) Telomere length regulation and telomeric chromatin require the nonsense-mediated mRNA decay pathway, *Mol Cell Biol.* 18, 6121-30.
  101. Lelivelt, M. J. & Culbertson, M. R. (1999) Nonsense Mediated mRNA decay in,
  102. Longtine, M. S., McKenzie, A., 3rd, Demarini, D. J., Shah, N. G., Wach, A., Brachat, A., Philippsen, P. & Pringle, J. R. (1998) Additional modules for versatile and economical PCR-based gene deletion and modification in *Saccharomyces cerevisiae*, *Yeast.* 14, 953-61.
  103. Drubin, D. G., Jones, H. D. & Wertman, K. F. (1993) Actin structure and function: roles in mitochondrial organization and morphogenesis in budding yeast and identification of the phalloidin-binding site, *Mol Biol Cell.* 4, 1277-94.
  104. Altamura, N., Groudinsky, O., Dujardin, G. & Slonimski, P. P. (1992) NAM7 nuclear gene encodes a novel member of a family of helicases with a Zn-ligand motif and is involved in mitochondrial functions in *Saccharomyces cerevisiae*, *J mol Biol.* 224, 575-587.
  105. Hartwell, L. H. & Kastan, M. B. (1994) Cell cycle control and cancer, *Science.* 266, 1821-8.
  106. Herrick, D., Parker, R. & Jacobson, A. (1990) Identification and comparison of stable and unstable mRNAs in *Saccharomyces cerevisiae*, *Mol Cell Biol.* 10, 2269-84.
  107. Parker, R., Herrick, D., Peltz, S. W. & Jacobson, A. (1991) Measurement of mRNA decay rates in *Saccharomyces cerevisiae*, *Methods Enzymol.* 194, 415-23.
  108. Johnson, A. W. & Kolodner, R. D. (1995) Synthetic lethality of *sep1 (xrn1) ski2* and *sep1 (xrn1) ski3* mutants of *Saccharomyces cerevisiae* is independent of killer virus and suggests a general role for these genes in translation control, *Mol Cell Biol.* 15, 2719-27.
  109. Thiele, D. J. & Hamer, D. H. (1986) Tandemly duplicated upstream control sequences mediate copper-induced transcription of the *Saccharomyces cerevisiae* copper-metallothionein gene, *Mol Cell Biol.* 6, 1158-63.
  110. Johnston, M. & Davis, R. W. (1984) Sequences that regulate the divergent GAL1-GAL10 promoter in *Saccharomyces cerevisiae*, *Mol Cell Biol.* 4, 1440-8.
  111. Heaton, B., Decker, C., Muhlrud, D., Donahue, J., Jacobson, A. & Parker, R. (1992) Analysis of chimeric mRNAs derived from the STE3 mRNA identifies multiple regions within yeast mRNAs that modulate mRNA decay, *Nucleic Acids Res.* 20, 5365-73.
  112. Muhlrud, D., Hunter, R. & Parker, R. (1992) A rapid method for localized mutagenesis of yeast genes, *Yeast.* 8, 79-82.
  113. Bai, C., Sen, P., Hofmann, K., Ma, L., Goebel, M., Harper, J. W. & Elledge, S. J. (1996) SKP1 connects cell cycle regulators to the ubiquitin proteolysis machinery through a novel motif, the F-box, *Cell.* 86, 263-74.
  114. Kaplan, K. B., Hyman, A. A. & Sorger, P. K. (1997) Regulating the yeast kinetochore by ubiquitin-dependent degradation and Skp1p-mediated phosphorylation, *Cell.* 91, 491-500.
  115. Kopski, K. M. & Huffaker, T. C. (1997) Suppressors of the *ndc10-2* mutation: a role for the ubiquitin system in *Saccharomyces cerevisiae* kinetochore function, *Genetics.* 147, 409-20.
  116. Russell, I. D., Grancell, A. S. & Sorger, P. K. (1999) The unstable F-box protein p58-Ctf13 forms the structural core of the CBF3 kinetochore complex, *J Cell Biol.* 145, 933-50.
  117. Yoon, H. J. & Carbon, J. (1995) Genetic and biochemical interactions between an essential kinetochore protein, Cbf2p/Ndc10p, and the CDC34 ubiquitin-conjugating enzyme, *Mol Cell Biol.* 15, 4835-42.
  118. Spellman, P. T., Sherlock, G., Zhang, M. Q., Iyer, V. R., Anders, K., Eisen, M. B., Brown, P. O., Botstein, D. & Futcher, B. (1998) Comprehensive identification of cell cycle-regulated genes of the yeast *Saccharomyces cerevisiae* by microarray hybridization, *Mol Biol Cell.* 9, 3273-97.
  119. Cho, R. J., Campbell, M. J., Winzler, E. A., Steinmetz, L., Conway, A., Wodicka, L., Wolfsberg, T. G., Gabrielian, A. E., Landsman, D., Lockhart, D. J. & Davis, R. W. (1998) A genome-wide transcriptional analysis of the mitotic cell cycle, *Mol Cell.* 2, 65-73.
  120. Wittenberg, C., Sugimoto, K. & Reed, S. I. (1990) G1-specific cyclins of *S. cerevisiae*: cell cycle periodicity, regulation by mating pheromone, and association with the p34CDC28 protein kinase, *Cell.* 62, 225-37.
  121. Enomoto, S., Longtine, M. S. & Berman, J. (1994) TEL+CEN antagonism on plasmids involves telomere repeat sequences tracts and gene products that interact with chromosomal telomeres, *Chromosoma.* 103, 237-50.