

Abmayr, S.M. and C.A. Keller. *Drosophila* myogenesis, and insights into the role of *nautilus*. Curr. Topics Dev. Biol. 38:35-80.

Keller, C.A., M.A. Grill, and **S.M. Abmayr**. A role for *nautilus* in the differentiation of muscle precursors. Dev. Biol. 202:157-171.

Hansen, D. and **P. Babitzke**. *trp* RNA-binding attenuation protein-mediated long distance RNA refolding regulates translation of *trpE* in *Bacillus subtilis*. J. Biol. Chem. 273:20494-20503.

Granger, L., E.B. O'Hara, R. Wang, F.V. Meffen, K. Armstrong, S.D. Yancey, **P. Babitzke**, and S.R. Kushner. The *Escherichia coli mrsC* gene is required for cell growth and mRNA decay. J. Bacteriol. 180:1920-1928.

Zeljka, K., **P. Babitzke**, and E. Hoffman. Myotonic dystrophy: Molecular windows on a complex etiology. Nucleic Acids Res. 26:1363-1368.

Bollinger, J.M., Jr., C. Krebs, A. Vicol, S. Chen, B.A. Ley, D.E. Edmondson, and B.H. Huynh. Engineering the diiron site of *Escherichia coli* ribonucleotide reductase protein R2 to accumulate an intermediate similar to Hperoxo, the putative peroxodiiron(III) complex from the methane monooxygenase catalytic cycle. J. Am. Chem. Soc. 120:1094-1095.

Huynh, B.H., **J.M. Bollinger, Jr.**, and D.E. Edmondson. Reaction intermediates in oxygen activation by enzymes containing carboxylate-bridged binuclear iron clusters. In: Spectroscopic Methods in Bioinorganic Chemistry. (E. I. Solomon and K. O. Hodgson, eds.), pp. 403-422, American Chemical Society, Washington, D.C.

Moënné-Loccoz, P., J. Baldwin, B.A. Ley, T.M. Loehr, and **J.M. Bollinger, Jr.** O₂ activation by non-heme diiron proteins: Identification of a symmetric μ -1,2-peroxide in a mutant of ribonucleotide reductase. Biochemistry 37:14659-14663.

Parkin, S.E., S. Chen, B.A. Ley, L. Mangravite, D.E. Edmondson, B.H. Huynh, and **J.M. Bollinger, Jr.** Electron injection through a specific pathway determines the outcome of oxygen activation at the diiron cluster in the F208Y mutant of *Escherichia coli* ribonucleotide reductase protein R2. Biochemistry 37:1124-1130.

Chung, S., G. Shen, J.G. Ormerod, and **D.A. Bryant**. Insertional inactivation studies of the *csmA* and *csmC* genes of the green sulfur bacterium *Chlorobium vibrioforme* 8327: The chlorosome protein CsmA is required for viability but CsmC is dispensable. FEMS Microbiol. Lett. 164:353-361.

Gruber, T.M. and **D.A. Bryant**. An overview of sigma factors of RNA polymerase in phototrophic bacteria. In: The Phototrophic Prokaryotes. (G.A. Peschek, W. Löffelhardt, and G. Schmetterer, eds.), pp. 791-798, Plenum, Vienna.

Gruber, T.M. and **D.A. Bryant**. Characterization of the alternative sigma factors SigD and SigE in *Synechococcus* sp. strain PCC 7002. SigE is implicated in transcription of post-exponential-phase-specific genes. Arch. Microbiol. 169:211-219.

Gruber, T.M. and **D.A. Bryant**. Characterization of the group 1 and group 2 sigma factors of the green sulfur bacterium *Chlorobium tepidum* and the green gliding bacterium *Chloroflexus aurantiacus*. Arch. Microbiol. 170:285-296.

Gruber, T.M., J.A. Eisen, K. Gish, and **D.A. Bryant**. The phylogenetic relationships of *Chlorobium tepidum* and *Chloroflexus aurantiacus* based upon their RecA sequences. FEMS Microbiol. Lett. 162:53-60.

Nomura, C. and **D.A. Bryant**. Cytochrome *c6* from *Synechococcus* sp. PCC 7002. In: The Phototrophic Prokaryotes, (G. A. Peschek, W. Löffelhardt, and G. Schmetterer, eds.), pp. 269-274. Plenum, Vienna.

Sakamoto, T. and **D.A. Bryant**. Growth at low temperature causes nitrogen limitation in the cyanobacterium *Synechococcus* sp. PCC 7002. Arch. Microbiol. 169:10-19.

Sakamoto, T., V.B. Delgaizo, and **D.A. Bryant**. Growth on urea can trigger peroxidative death of the cyanobacterium *Synechococcus* sp. strain PCC 7002. Appl. Envir. Microbiol. 64:2361-2366.

Sakamoto, T., G. Shen, S. Higashi, N. Murata, and **D.A. Bryant**. Alteration of low-temperature susceptibility of the cyanobacterium *Synechococcus* sp. PCC 7002 by genetic manipulation of membrane lipid unsaturation. Arch. Microbiol. 169:20-28.

Xia, Z., R.W. Broadhurst, E.D. Laue, **D.A. Bryant**, J.H. Golbeck, and D.S. Bendall. Structure and properties of Psad in solution. Eur. J. Biochem. 255:309-316.

Yang, F., G. Shen, W.M. Schluchter, B. Zybailov, A. Ganago, **D.A. Bryant**, and J.H. Golbeck. Deletion of the Psaf polypeptide modifies the environment of the redox-active phylloquinone (A1). Evidence for unidirectionality of electron transfer in photosystem I. J. Phys. Chem. 102:8288-8299.

Yang, F., G. Shen, W.M. Schluchter, B. Zybailov, A. Ganago, J.H. Golbeck, and **D.A. Bryant**. Structural and functional analyses of cyanobacterial photosystem I: The directionality of electron transfer. In: The Phototrophic Prokaryotes. (G.A. Peschek, W. Löffelhardt, and G. Schmetterer, eds.), pp. 21-33. Plenum, Vienna.

Zhao, J., R. Li, and **D.A. Bryant**. Measurement of Photosystem I activity by photoreduction of recombinant flavodoxin. Anal. Biochem. 264:263-270.

Farber, G.K. Sensing photons. Nature Struct. Biol. 5:415-418.

Staley, M., L.C. Zeringue, R.D. Kidd, **G.K. Farber**, and B.T. Nixon. Crystallization and characterization of the *Rhizobium meliloti* DctD two-component receiver domain. Acta Cryst. D54:1416-1418.

Teo, B., R.D., Kidd, J. Mack, A. Tiwari, D. Hernandez, A.T. Phillips, and **G.K. Farber**. Crystallization and preliminary x-ray studies of *Pseudomonas putida* histidine ammonia-lyase. Acta Cryst. D54:681-683.

Becker, D.F., U. Leartsakulpanich, K.K. Surerus, **J.G. Ferry**, and S.W. Ragsdale. Electrochemical and spectroscopic properties of the iron-sulfur flavoprotein from *Methanosarcina thermophila*. J. Biol. Chem. 273:26462-26469.

Maupin-Furlow, J.A., H.C. Aldrich, and **J.G. Ferry**. Biochemical characterization of the 20S proteasome from the methanoarchaeon *Methanosarcina thermophila*. J. Bacteriol. 180:1480-1487.

Singh-Wissmann, K., C. Ingram-Smith, R.D. Miles, and **J.G. Ferry**. Identification of essential glutamates in the acetate kinase from *Methanosarcina thermophila*. J. Bacteriol. 180:1129-1134.

Frisque, R.J. Rearranged and chimaeric primate polyomavirus genomes. Dev. Biol. Stand. 94:103-113.

Levine, A., J. Butel, K. Dorries, J. Goedert, **R. Frisque**, R. Garcea, A. Morris, F. O'Neill, and K. Shah. SV40 as a putative human commensal. Dev. Biol. Stand. 94:245-269.

Newman, J.S., and **R.J. Frisque**. Identification of SV40 in brain, kidney and urine of healthy and SIV-infected rhesus monkeys. J. Neurovirol. 4:394-406.

Hunter, S.J., **C.V. Gay**, P.A. Osdosy, and L.L. Peters. Spectrin localization in osteoclasts: Immunocytochemistry, cloning and partial sequencing. J. Cell. Biochem. 71:204-215.

Paul, C.A., K.D. Brubaker, R.M. Leach, and **C.V. Gay**. Detection of endogenous biotin-containing proteins in bone and cartilage cells with streptavidin systems. Biochem. Biophys. Res. Comm. 247:312-314.

Reginato, A.M., R.I. Bashey, G. Rosselot, R.M. Leach, **C.V. Gay**, and S.A. Jimenez. Type X collagen biosynthesis and expression in avian tibial dyschondroplasia. Osteoarthr. Cartilage 6:125-136.

Stains, J.P., and **C.V. Gay**. Asymmetric distribution of functional sodium-calcium exchanger in primary osteoblasts. J. Bone Miner. Res. 13:1862-1869.

Benjamin, L.R., and **D.S. Gilmour**. Nucleosomes are not necessary for promoter-proximal pausing in vitro on the Drosophila hsp70 promoter. Nucleic Acids Res. 26:1051-1055.

Golbeck, J.H. Comparison of *in vitro* and *in vivo* mutants of PsuC in Photosystem I: Protocols for mutagenesis and techniques for analysis. In: Methods in Enzymol.: Photosynthesis: Molecular Biology of Energy Capture (L. McIntosh, ed.) 297:95—123, Academic Press Inc, San Diego, CA.

Hays, A-M., I.R. Vassiliev, **J.H. Golbeck**, and R. Debus. Role of D1-His190 in proton coupled electron transfer reactions in Photosystem II: A chemical complementation study. Biochemistry37:11352-11365.

Kjaer, B., N.-U. Frigaard, F. Yang, B. Zybailov, M. Miller, **J.H. Golbeck**, and H.V. Scheller. Menaquinone-7 in the reaction center complex of the green sulfur bacterium *Chlorobium vibrioforme* functions as the electron acceptor, A₁'. Biochemistry 37:3237-3242.

Mamedov, M.D., K.N. Gourovskaya, I.R. Vassiliev, **J.H. Golbeck**, and A. Yu. Semenov. Electrogenicity accompanies photoreduction of the iron-sulfur clusters F_A and F_B in Photosystem I. FEBS Lett. 431:219-223.

Naver, H., M.P. Scott, **J.H. Golbeck**, and H.V. Scheller. The eight amino acid internal loop of PSI-C mediates association of low molecular mass iron-sulfur proteins with the P700-F_X core in Photosystem I. J. Biol. Chem. 273:18778-18783.

Vassiliev, I.R., Y.-S. Jung, F. Yang, and **J.H. Golbeck**. PsuC is oriented with iron-sulfur cluster F_B as the immediate electron donor to ferredoxin and flavodoxin in Photosystem I. Biophys. J.74:2029-2035.

Xia, Z., R.W. Broadhurst, E.D. Laue, B.D. Bryant, **J.H. Golbeck**, and D.S. Bendall. Structure and properties in solution of PsuA, an extrinsic polypeptide of Photosystem I. Eur. J. Biochem.255:309-316.

Yang, F., G. Shen, W.M. Schluchter, B.L. Zybailov, A.O. Ganago, I. Vassiliev, D.A. Bryant, and **J. H. Golbeck**. Deletion of the PsaF polypeptide modifies the environment of the redox-active phylloquinone (A₁). Evidence for unidirectionality of electron transfer in Photosystem I. J. Phys. Chem. 102:8288-8299.

Bender, M., A. Reik, J. Close, A. Telling, E. Epner, S. Fiering, **R. Hardison**, and M. Groudine. Description and targeted deletion of 5' hypersensitive site 5 and 6 of the mouse-globin locus control region. Blood 92:4394-4403.

Chui, D.H.K., **R. Hardison**, C. Riemer, W. Miller, M.F.H. Carver, T.P. Molchanova, G.D. Efremov, and T.H.J. Huisman. An electronic database of human hemoglobin variants on the World Wide Web. Blood. 91:2643-2644.

Hardison, R. Hemoglobins from bacteria to man: Evolution of different patterns of gene expression. J. Exp. Biol. 201:1099-1117.

Hardison, R., C. Riemer, D.H.K. Chui, T.H.J. Huisman, and W. Miller. Electronic access to sequence alignments, experimental results, and human mutations as an aid to studying globin gene regulation. Genomics 47:429-437.

Hardison, R.C., D.H.K. Chui, C.R. Riemer, W. Miller, M.F.H. Carver, T.P. Molchanova, G.D. Efremov, and T.H.J. Huisman. Access to a syllabus of human hemoglobin variants (1996) via the World Wide Web. Hemoglobin 22:113-127.

Li, J., C.T. Noguchi, W. Miller, **R. Hardison**, and A. Schechter. Multiple regulatory elements in the 5' flanking sequence of the human epsilon globin gene. J. Biol. Chem. 273:10202-10209.

Riemer, C., A. El Sherbini, N. Stojanovic, S. Schwartz, P. Kwitkin, W. Miller, and **R. Hardison**. A database of experimental results on globin gene expression. Genomics 53:325-337.

Shellenberger, K., R. Grindeland, and **W.C. Hymer**. Rat anterior pituitary hormone cells: responses to variable gravity. Aviat. Space and Environ. Med. 69:37-44.

Marc, J., C.L. Granger, J. Brincat, D.D. Fisher, **T.-h. Kao**, A.G. McCubbin, and R.J. Cyr. Use of a GFP-MAP4 reporter gene for visualizing cortical microtubule rearrangements in living epidermal cells. Plant Cell 10:1927-1940

Verica, J.A. and **T.-h. Kao**. Self-incompatibility: Self/nonself discrimination between pollen and pistil. In: Cellular Interaction of Signalling Pathways in Plant Development, (F.L. Schiavo, R.L. Last, G. Morelli, and N.V. Raikhel, eds.) NATO ASI Series, Subseries H, Cell Biology 104:263-273, Springer-Verlag, Berlin, Heidelberg.

Verica, J.A., A.G. McCubbin, and **T.-h. Kao**. Are the hypervariable regions of S RNases sufficient for allele-specific recognition of pollen? Plant Cell 10:314-316.

van Huizen, R., K. Miller, D.-M. Chen, Y. Li, **Z.-C. Lai**, R.W. Raab, W.S. Stark, R.D. Shortridge, and M. Li. Two distinctly positioned PDZ domains mediate multivalent INAD-phospholipase C interactions essential for G protein-coupled signaling. EMBO J. 17:2285-2297.

Miles, M.P., S.K. Leach, W.J. Kraemer, K. Dohi, J.A. Bush, and **A.M. Mastro**. Leukocyte adhesion molecule expression during intense resistance exercise. J. Appl. Phys. 85:1604-1609.

- N.T. Triplett-McBride, **A.M. Mastro**, J.M. McBride, J.A. Bush, M. Putukian, W.J. Sebastianelli, and W.J. Kraemer. Plasma proenkephalin peptide F and human B cell responses to exercise stress in fit and unfit women. Peptides 19:731-738.
- Staley, M., L.C. Zeringue, R.D. Kidd, **B.T. Nixon**, and G.K. Farber. Crystallization and preliminary X-ray studies of the *Rhizobium meliloti* DctD two-component receiver domain. Acta Cryst. D54:1416 — 1418.
- Teo, B., R.D. Kidd, J. Mack, A. Tiwari, D. Hernandez, **A.T. Phillips**, and G.K. Farber. Crystallization and preliminary x-ray studies of *Pseudomonas putida* histidine ammonia-lyase. Acta Cryst. D54:681-683.
- Carlini, L.E., U. Curth, B. Kindler, C. Urbanke, and **R.D. Porter**. Identification of amino acids stabilizing the tetramerization of the single-stranded DNA-binding protein of *Escherichia coli*. FEBS Lett. 430:197-200.
- Chicca, J.J., D. Auble, and **B.F. Pugh**. Cloning and biochemical characterization of TAF-172, a human homologue of yeast Mot1. Mol. Cell. Biol. 18:1701-1710.
- Grant, P.A., D. Schieltz, M.G. Pray-Grant, D.J. Steger, **J.C. Reese**, J. Yates, and J.L. Workman. A subset of TAF_{II}s are integral components of the SAGA complex required for nucleosome acetylation and transcriptional stimulation. Cell 94:45-53.
- Halleck, M.S., D. Pradhan, C. Blackman, C. Berkes, P. Williamson, and **R. A. Schlegel**. Multiple members a third subfamily of P-type ATPases identified by genomic and EST sequences. Genome Res. 8:354-361.
- Schlegel, R.A.**, S. Krahling, A.J. Christie, and P. Williamson. Phosphatidylserine as a signal for recognition and phagocytosis: The proteins involved. In: Choline, Phospholipids, Health and Disease. (B. F. Szuhaj and S. Zeisel, eds), pp. 57-68. American Oil Chemists Society Press, Champaign, IL.
- Steitz, M., J. Wickenheisser, and **E. Siegfried**. Over-expression of Zeste white 3 blocks Wingless signaling in the *Drosophila* embryonic midgut. Dev. Biol. 197:218-233.
- Patterson, H.G., C.C. Landel, D. Landsman, C.L. Peterson, and **R.T. Simpson**. The biochemical and phenotypic characterization of Hho1p, the putative linker histone H1 of *Saccharomyces cerevisiae*. J. Biol. Chem. 273, 7268-7276.
- Xu, M., **R.T. Simpson**, and M.P. Kladde. Gal4p-mediated chromatin remodeling depends on binding site position in nucleosomes but does not require DNA replication. Mol. Cell. Biol. 18:1201-1212.
- Wu, C., K. Weiss, C. Yang, M.A. Harris, B.-K. Tye, C.S. Newlon, **R.T. Simpson**, and J.E. Haber. Mcm1 regulates donor preference controlled by the recombination enhancer in *Saccharomyces* mating-type switching. Genes Dev. 12:1726-1737.
- Weiss, K., and **R.T. Simpson**. High resolution structural analysis of chromatin at specific loci: *Saccharomyces cerevisiae* silent mating type locus HMLalpha. Mol. Cell. Biol. 18: 5392-5403.
- Kladde, M.P., and **R.T. Simpson**. Rapid detection of functional expression of C-5-DNA methyltransferases in yeast. Nucleic Acids Res 26:1354-1355.
- Xu, M., M.P. Kladde, J.L. Van Etten, and **R.T. Simpson**. Cloning, characterization and expression of the gene coding for a cytosine-5-DNA methyltransferase recognizing GpC. Nucleic Acids Res. 26:3961-3967.

Simpson, R.T. Chromatin structure and analysis of mechanisms of activators and repressors. Methods 15:283-94.

Thomas, G.H., D.C. Zarnescu, A.E. Juedes, M.A. Bales, A. Londergan, C.C. Korte, and D.P. Kiehart. *Drosophila* S_{Heavy} -spectrin is essential for development and contributes to specific cell fates in the eye. Development 125:2125-2134.

Thomas, G.H. Molecular evolution of spectrin repeats. Bioessays 20:600.

Tan, S., and T.J. Richmond. Crystal structure of the yeast MAT2/MCM1/DNA ternary complex. Nature 391:660-666.

Tan, S., and T.J. Richmond. Eukaryotic transcription factors. Curr. Opin. Struct. Biol. 8:41-48.

Ambert-Balay, K., S.M. Fuchs, and **M. Tien**. Identification of the veratryl alcohol binding site in lignin peroxidase by site-directed mutagenesis. Biochem. Biophys. Res. Commun. 251:283-286.

Banci, L., I. Bertini, L. dal Pozzo, R. del Conte, and **M. Tien**. Monitoring the role of oxalate in manganese peroxidase. Biochemistry 37:9009-9015.

Zapanta, L.S., T. Hattori, M. Rzetskaya, and **M. Tien**. The cloning of *Phanerochaete chrysosporium leu2* by complementation of bacterial auxotrophs and transformation of fungal auxotrophs. Appl. Environ. Microbiol. 64:2624-2629.

Barlev, N.A., V. Poltoratsky, T. Owen-Hughes, C. Ying, L. Liu, **J.L. Workman**, and S.L. Berger. Repression of GCN5 histone acetyltransferase activity via bromodomain-mediated binding and phosphorylation by the Ku-DNA-dependent protein kinase complex. Mol. Cell. Biol. 18:1349-1358.

Côté, J., C.L. Peterson, and **J.L. Workman**. Perturbation of nucleosome structure by the SWI/SNF complex persists following its detachment, enhancing subsequent transcription factor binding. Proc. Natl. Acad. Sci. USA. 9:4947-4952.

Eberharter, A., S. John. P.A. Grant, R.T. Utley, and **J.L. Workman**. Identification and analysis of yeast nucleosomal histone acetyltransferase complexes. Methods 15:315-321.

Grant, P.A., D. Schieltz, M.G. Pray-Grant, J.R. Yates III, and **J.L. Workman**. The ATM-related cofactor Tra1 is a component of the purified SAGA complex. Mol. Cell 2:863-867.

Grant, P.A., and **J.L. Workman**. Transcription: A lesson in sharing (news and views). Nature 396:410-411.

Grant, P.A., D. Schieltz, M.G. Pray-Grant, D.J. Steger, J.C. Reese, J.R. Yates III, and **J.L. Workman**. A subset of TBP-associated factors, TAF_{II}s, are integral components of the SAGA complex that are required for nucleosome acetylation and transcription stimulation. Cell 94:45-53.

Grant, P.A., D.E. Sterner, L.J. Duggan, **J.L. Workman**, and S.L. Berger. The SAGA unfolds: convergence of transcription regulators in chromatin modifying complexes. Trends Cell Biol. 8:193-197.

John, S., and **J.L. Workman**. Bookmarking genes for activation on condensed mitotic chromosomes. Bioessays 20:275-279.

John, S., and **J.L. Workman**. Just the facts of chromatin transcription (perspective). Science 282:1836-1837.

Mutskov, V., D. Gerber, D. Angelov, J. Ausio, **J.L. Workman**, and S. Dimitrov. Persistent interactions of the core histone tails with nucleosomal DNA following acetylation and transcription factor binding. Mol. Cell. Biol. 18:6298-6304.

Steger, D.J., A. Eberharter, S. John, P.A. Grant, and **J.L. Workman**. Purified histone acetyltransferase complexes stimulate HIV-1 transcription from preassembled nucleosomal arrays. Proc. Natl. Acad. Sci. USA. 95:12924-12929.

Utlely, R.T., K. Ikeda, P.A. Grant, J. Côté, D.J. Steger, A. Eberharter, S. John, and **J.L. Workman**. Transcriptional activators target histone acetyltransferase complexes to nucleosomes. Nature 394:498-502.

Vignali, M., and **J.L. Workman**. Location and function of linker histones (review). Nature Struct. Biol. 5:1025-1028.

Workman, J.L., Editor, Chromatin Function in Transcription. Methods: A Companion to Methods in Enzymology. Academic Press, Harcourt Brace & Company, San Diego, CA

Workman, J.L., and Kingston, R.E. Alteration of nucleosome structure as a mechanism of transcriptional regulation. Ann. Rev. Biochem. 67:549-579.