



Ades, S. E., J. D. Hayden, and M. E. Laubacher. Envelope Stress. In: Bacterial Stress Responses. (G. Storz and R. Hengge, eds.), pp. 115-131, ASM Press, Washington, D.C.

Saadatpour, A., I. Albert, and R. Albert. Attractor analysis of asynchronous Boolean models of signal transduction networks. J. Theor. Biol. 266:641-656.

Christensen, C., I. Albert, B. Grenfell, and R. Albert. Disease dynamics in a dynamic social network. Physica A 389:2663-2674.

Yakhnin, A. V. and P. Babitzke. Mechanism of NusG-stimulated pausing, hairpin-dependent pause site selection and intrinsic termination at overlapping pause and termination sites in the *Bacillus subtilis trp* leader. Mol. Microbiol. 76:690-705.

Romeo, T. and P. Babitzke. Csr (Rsm) system and its overlap and interplay with c-di-GMP regulatory systems. In: The Second Messenger Cyclic Di-GMP. (A. Wolfe and K. Visick, eds.), pp. 201-214, ASM Press, Washington, D.C.

Hollenhorst, M. A., S. B. Bumpus, M. L. Matthews, J. M. Bollinger, Jr., N. L. Kelleher, and C. T. Walsh. The nonribosomal peptide synthetase enzyme DdaD tethers N( $\beta$ )-Fumaramoyl-1-2,3-diaminopropionate for Fe(II)/ $\alpha$ -Ketoglutarate-dependent epoxidation by DdaC during Dapdiamide antibiotic biosynthesis. J. Am. Chem. Soc. 132:15773-15781.

Flashman, E., L. M. Hoffart, R. B. Hamed, J. M. Bollinger, Jr., C. Krebs, and C. J. Schofield. Evidence for the slow reaction of hypoxia-inducible factor prolyl hydroxylase 2 with oxygen. FEBS J. 277:4089-4099.

Li, N., V. K. Korboukh, C. Krebs, and J. M. Bollinger, Jr. Four-electron oxidation of *p*-hydroxylaminobenzoate to *p*-nitrobenzoate by a peroxodiferric complex in AurF from *Streptomyces thioluteus*. Proc. Natl. Acad. Sci. USA 107:15722-15727.

Jiang, W., J. Xie, P. Varano, C. Krebs, and J. M. Bollinger, Jr. Two distinct mechanisms of inactivation of the class Ic ribonucleotide reductase from *Chlamydia trachomatis* by Hydroxyurea: Implications for the protein gating of inter-subunit electron transfer. Biochemistry 49:5340-5349.

Ye, S, J. C. Price, E. W. Barr, M. T. Green, J. M. Bollinger, Jr., C. Krebs, and F. Neese. Cryoreduction of the NO-adduct of Taurine: $\alpha$ -ketoglutarate dioxygenase (TauD) yields an elusive {FeNO}<sup>8</sup> species. J. Am. Chem. Soc. 132:4739-4751.

van der Donk, W. A., C. Krebs, and J. M. Bollinger, Jr. Substrate activation by iron superoxo intermediates. Curr. Opin. Struct. Biol. 20:673-683.

Grove, T. L., J. H. Ahlum, P. Sharma, C. Krebs, and S. J. Booker. A consensus mechanism for radical SAM-dependent dehydrogenation? BtrN contains two [4Fe-4S] clusters. Biochemistry 49:3783-3785.

**Booker, S. J.** and T. L. Grove. Mechanistic and functional versatility of radical SAM enzymes. F1000 Biol. Rep. 2:52.

Loveland-Curtze, J., V. Miteva, and **J. Brechley**. Novel ultramicrobacterial isolates from a deep Greenland ice core represent a proposed new species, *Chryseobacterium greenlandense* sp. Nov. Extremophiles 14:61-69.

Lubner, C. E., R. Grimme, **D. A. Bryant**, and J. H. Golbeck. Wiring photosystem I for light-induced hydrogen production. Biochemistry 49:404-414.

Tsukatani, Y., J. Wen, R. E. Blankenship, and **D. A. Bryant**. Characterization of the bacteriochlorophyll *a*-binding, Fenna-Matthews-Olson protein from *Candidatus Chloracidobacterium thermophilum*. Photosynth. Res. 104:201-209.

Biswas, A., Y. M. Vasquez, T. M. Dragomani, M. L. Kronfel, S. R. Williams, R. M. Alvey, **D. A. Bryant**, and W. S. Schluchter. Biosynthesis of cyanobacterial phycobiliproteins in *Escherichia coli*: chromophorylation efficiency and specificity of all bilin lyases from *Synechococcus* sp. strain PCC 7002. Appl. Environ. Microbiol. 76:2729-2739.

Wenter, R., K. Hütz, D. Dibbern, T. Li, V. Reisinger, M. Plöschner, L. Eichacker, B. Eddie, T. Hanson, **D. A. Bryant**, and J. Overmann. Expression based identification of genetic determinants of the bacterial symbiosis in '*Chlorochromatium aggregatum*.' Environ. Microbiol. 12:2259-2276.

van der Meer, M. T. J., C. G. Klatt, J. Wood, **D. A. Bryant**, M. M. Bateson, L. Lammerts, S. Schouten, J. S. Sinninghe Damsté, M. T. Madigan, and D. M. Ward. Cultivation and genomic, nutritional and lipid biomarker characterization of *Roseiflexus* sp. strains closely related to predominant *in situ*. J. Bacteriol. 192:3033-3042.

McNeely, K., Y. Xu, N. Bennette, G. Ananyev, **D. A. Bryant**, and G. C. Dismukes. Metabolic engineering of fermentative carbon metabolism stimulates solar hydrogen production in the cyanobacterium *Synechococcus* sp. PCC 7002. Appl. Environ. Microbiol. 76:5032-5038.

Zhu, Y., J. E. Graham, M. Ludwig, W. Xiong, R. M. Alvey, G. Shen, and **D. A. Bryant**. Roles of xanthophyll carotenoids in protection against photoinhibition and oxidative stress in the cyanobacterium *Synechococcus* sp. strain PCC 7002. Arch. Biochem. Biophys. 504:86-99.

Scott, N. L., Y. Xu, G. Shen, D. A. Vuletich, C. J. Falzone, Z. Li, M. Ludwig, M. Pond, M. R. Preimesberger, **D. A. Bryant**, and J. T. Lecomte. Functional and structural characterization of the 2/2 hemoglobin of *Synechococcus* sp. PCC 7002. Biochemistry 49:7000-7011.

Brown I. I., **D. A. Bryant**, D. Casamatta, K. Thomas-Keprta, S. A. Sarkisova, G. Shen, J. E. Graham, E. S. Boyd, D. H. Garrison, J. W. Peters, and D. S. McKay. Polyphasic characterization of a thermotolerant, siderophilic filamentous cyanobacterium that produces intracellular and extracellular iron deposits. Appl. Environ. Microbiol. 76:6664-6672.

Carrieri, D., D. Momot, I. A. Brasg, G. Ananyev, O. Lenz, **D. A. Bryant**, and G. C. Dismukes. Boosting autofermentation rates and product yields with sodium stress cycling: Application to renewable fuel production by cyanobacteria. Appl. Environ. Microbiol. 76:6455-6462.

Wen, J., Y. Tsukatani, W. Cui, H. Zhang, M. L. Gross, **D. A. Bryant**, and R. E. Blankenship. Structural and spectroscopic insights of the FMO antenna protein of the aerobic chlorophototroph *Candidatus Chloracidobacterium thermophilum*. Biochim. Biophys. Acta 1807:157-164.

Lubner, C. E., P. Knörzer, P. Silva, K. A. Vincent, T. Happe, **D. A. Bryant**, and J. H. Golbeck. Wiring and [FeFe]-hydrogenase with photosystem I for light-induced hydrogen production. Biochemistry 49:10264-10266.

Te Velthuis, A. J., J. J. Arnold, **C. E. Cameron**, S. H. van den Worm, and E. J. Snijder. The RNA polymerase activity of SARS-coronavirus nsp12 is primer dependent. Nucleic Acids Res. 38:203-214.

Wang, Q., J. J. Arnold, A. Uchida, K. D. Raney, and **C. E. Cameron**. Phosphate release contributes to the rate-limiting step for unwinding by an RNA helicase. Nucleic Acids Res. 38:1312-1324.

Matlock, D. L., L. Yeruva, A. K. Byrd, S. G. Mackintosh, C. Langston, C. Brown, **C. E. Cameron**, C. J. Fischer, and K. D. Raney. Investigation of translocation, DNA unwinding, and protein displacement by NS3h, the helicase domain from the hepatitis C virus helicase. Biochemistry 49:2097-2109.

Lodeiro, M. F., A. U. Uchida, J. J. Arnold, S. L. Reynolds, I. M. Moustafa, and **C. E. Cameron**. Identification of multiple rate-limiting steps during the human mitochondrial transcription cycle in vitro. J. Biol. Chem. 285:16387-16402.

Toroney, R., S. R. Nallagatla, J. A. Boyer, **C. E. Cameron**, and P. C. Bevilacqua. Regulation of PKR by HCV IRES RNA: Importance of domain II and NS5A. J. Mol. Biol. 400:393-412.

Chatterji, U., P. Lim, M. D. Bobardt, S. Wieland, D. G. Cordek, G. Vuagniaux, F. Chisari, **C. E. Cameron**, P. Targett-Adams, T. Parkinson, and P. A. Gally. HCV resistance to cyclosporin A does not correlate with a resistance of the NS5A-cyclophilin A interaction to cyclophilin inhibitors. J. Hepatol. 53:50-56.

Hsu, N.-Y., O. Ilnytska, G. Belov, M. Santiana, Y.-H. Chen, P. Takvorian, C. Pau, H. van der Schaar, N. Kaushik-Basu, T. Balla, **C. E. Cameron**, E. Ehrenfeld, F. J. M. van Kuppeveld, and N. Altan-Bonnet. Viruses reorganize secretory pathway to form organelles with specific lipid microenvironment for RNA replication. Cell 141:799-811.

Shutt, T. E., J. Cotney, Y. Surovtseva, **C. E. Cameron**, and G. S. Shadel. Promoter-specific initiation of mitochondrial transcription in the absence of h-mtTFA/Tfam reveals an expanded dynamic range available for regulation of human mitochondrial gene expression. Proc. Natl. Acad. Sci. USA 107:12133-12138.

Cline, S. D., M. F. Lodeiro, L. J. Marnett, **C. E. Cameron**, and J. J. Arnold. Arrest of human mitochondrial RNA polymerase transcription by the biological aldehyde adduct of DNA, M1dG. Nucleic Acids Res. 38:7546-7557.

Hwang, J., L. Huang, S. L. Reynolds, G. Kihara, K. D. Raney, and **C. E. Cameron**. Biochemical characterization of the RNA-binding activity of hepatitis C virus NS5A protein. *J. Virol.* 84:12480-12491.

Wu, R., E. D. Smidansky, H. S. Oh, R. Takhampunya, R. Padmanabhan, **C. E. Cameron**, and B. R. Peterson. Synthesis of a 6-methyl-7-deaza analogue of adenosine that potently inhibits polio and dengue viruses. *J. Med. Chem.* 53:7958-7966.

**Dorman, F. L.**, J. J. Whiting, J. W. Cochran, and J. Gardea-Torresday. Gas Chromatography. *Anal. Chem.* 82:4775-4785.

Zhou, S. N., E. J. Reiner, C. Marvin, P. Helm, N. Riddell, **F. Dorman**, M. Misselwitz, L. Shen, P. Crozier, K. MacPherson, and I. D. Brindle. Development of liquid chromatography atmospheric pressure chemical ionization tandem mass spectrometry for analysis of halogenated flame retardants in wastewater. *Anal. Bioanal. Chem.* 396:1311-1320.

Zhou, S. N., E. J. Reiner, C. Marvin, T. Kolic, N. Riddell, P. Helm, **F. Dorman**, M. Misselwitz, and I. D. Brindle. Liquid chromatography-atmospheric pressure photoionization tandem mass spectrometry for analysis of 36 halogenated flame retardants in fish. *J. Chromatogr. A* 1217:633-641.

Zimmerman, S. A., J.-F. Tomb, and **J. G. Ferry**. Characterization of CamH from *Methanosarcina thermophila*, founding member of a subclass of the  $\gamma$  class of carbonic anhydrases. *J. Bacteriol.* 192:1353-1360.

Reichlen, M. J., K. S. Murakami, and **J. G. Ferry**. Functional analysis of the three TBP homologs in *Methanosarcina acetivorans*. *J. Bacteriol.* 192:1511-1517.

Lessner, D. J., L. Lhu, C. S. Wahal, and **J. G. Ferry**. An engineered methanogenic pathway derived from the domains *Bacteria* and *Archaea*. *mBio*:1:e00243-10.

**Ferry, J. G.** The gamma class of carbonic anhydrase. *Biochim. Biophys. Acta* 1804:374-381.

**Ferry, J. G.** CO in methanogenesis. *Ann. Microbiol.* 60:1-12.

**Ferry, J. G.** How to make a living exhaling methane. *Annu. Rev. Microbiol.* 64:453-473.

**Ferry, J. G.** The chemical biology of methanogenesis. *Planet Space Sci.* 58:1775-1783.

Bollag, B., C. A. Hofstetter, M. M. Reviriego-Mendoza, and **R. J. Frisque**. JC virus small t antigen binds phosphatase PP2A and Rb family proteins and is required for efficient viral DNA replication activity. *PLoS One* 5:e10606.

Reviriego-Mendoza, M. M. and **R. J. Frisque**. Interaction and co-localization of JC virus large T antigen and the F-box protein  $\beta$ -transducin-repeat containing protein. *Virology* 410:119-128.

Missra, A. and **D. S. Gilmour**. Interactions between DSIF (DRB sensitivity inducing factor), NELF (negative elongation factor), and the Drosophila RNA polymerase II transcription elongation complex. *Proc. Natl. Acad. Sci. USA* 107:11301-11306.

van der Est, A., S. Chirico, I. Karyagina, R. Cohen, G. Shen, and **J. H. Golbeck**. Alteration of the axial met ligand to electron acceptor  $A_0$  in Photosystem I: An investigation of low temperature electron transfer by multifrequency time resolved and CW EPR. Appl. Magn. Reson. 37:103-121.

Savitsky, A., O. Gopta, M. Mamedov, **J. Golbeck**, A. Tikhonov, K. Möbius, and A. Y. Semenov. Alteration of the axial met ligand to electron acceptor  $A_0$  in Photosystem I: Effect on the generation of  $P_{700}^+ A_1^-$  radical pairs as studied by W-band transient EPR. Appl. Magn. Reson. 37:85-102.

van der Est, A., Y. Puskar, I. Karyagina, B. Fonovic, T. Dudding, J. Niklas, W. Lubitz, and **J. H. Golbeck**. Incorporation of 2,4-disubstituted-1,4-naphthoquinones into the  $A_1$  binding site of Photosystem I studied by EPR and ENDOR spectroscopy. Appl. Magn. Reson. 37:65-83.

Lubner, C. E., R. Grimme, D. A. Bryant, and **J. H. Golbeck**. Wiring Photosystem I for direct solar hydrogen production. Biochemistry 49:404-414.

Jagannathan, B., S. Dekat, **J. H. Golbeck**, and K. V. Lakshmi. The assembly of a multi-subunit photosynthetic membrane protein complex: A site-specific spin labeling EPR spectroscopic study of the PsaC subunit in Photosystem I. Biochemistry 49:2398-2408.

Romberger, S., C. Castro, Y. Sun, and **J. H. Golbeck**. Identification and characterization of PshBII, An alternative  $F_A/F_B$  protein in the photosynthetic reaction center of *Heliobacterium modesticaldum*. Photosyn. Res. 104:293-303.

Romberger, S. and **J. H. Golbeck**. The bound iron-sulfur clusters in Type I photosynthetic reaction centers. Photosynth. Res. 104:336-346.

Lubner, C. E., P. Knörzer, P. Silva, K. A. Vincent, T. Happe, D. A. Bryant, and **J. H. Golbeck**. Wiring and [FeFe]-hydrogenase with photosystem I for light-induced hydrogen production. Biochemistry 49:10264-10266.

Chauhan, D., I. M. Folea, C. C. Jolley, R. Kouril, C. E. Lubner, S. Lin, D. Kolber, F. Wolfe-Simon, **J. H. Golbeck**, E. J. Boekema, and P. Fromme. A novel photosynthetic strategy for adaptation to low-iron aquatic environments. Biochemistry 50:686-692.

Jagannathan, B. and **J. H. Golbeck**. Photosynthesis: Microbial. In: The Desk Encyclopedia of Microbiology. (M. Schaechter, ed.), pp. 844-860, Elsevier LTD, Oxford.

**Gu, Y.** and C. Somerville. Cellulose synthase interacting protein: a new factor in cellulose synthesis. Plant Signal. Behav. 5:1561-1564.

**Gu, Y.**, N. Kaplinsky, M. Bringmann, A. Cobb, A. Carroll, A. Sampathkumar, T. I. Baskin, S. Persson, and C. Somerville. Identification of a cellulose synthase-associated protein required for cellulose biosynthesis. Proc. Natl. Acad. Sci. USA 107:12866-12871.

Vrablik, T. L., W. Wang, A. Upadhyah, and **W. Hanna-Rose**. Muscle type-specific responses to  $NAD^+$  salvage biosynthesis promote muscle function in *Caenorhabditis elegans*. Dev. Biol. 349:387-394.

French, J. B., Y. Cen, T. L. Vrablik, P. Xu, E. Allen, **W. Hanna-Rose**, and A. A. Sauve. Characterization of nicotinamidases: steady state kinetic parameters, classwide inhibition by nicotinaldehydes, and catalytic mechanism. Biochemistry 49:10421-10439.

Zhou, K. and **W. Hanna-Rose**. Movers and shakers or anchored: *Caenorhabditis elegans* nuclei achieve it with KASH/SUN. Dev. Dynam. 239:1352-1364.

Hsu, C.-H., Y. Zhang, and **R. C. Hardison**, NISC Comparative Sequencing Program, E. D. Green, and W. Miller. An effective method for detecting gene conversion events in whole genomes. J. Comput. Biol. 17:1281-1297.

Schuster, S. C., W. Miller, A. Ratan, L. P. Tomsho, B. Giardine, L. R. Kasson, R. S. Harris, D. C. Petersen, F. Zhao, J. Qi, C. Alkan, J. M. Kidd, Y. Sun, D. I. Drautz, P. Bouffard, D. M. Muzny, J. G. Reid, L. V. Nazareth, Q. Wang, R. Burhans, C. Riemer, N. E. Wittekindt, P. Moorjani, E. A. Tindall, C. G. Danko, W. S. Teo, A. M. Buboltz, Z. Zhang, Q. Ma, A. Oosthuysen, A. W. Steenkamp, H. Oostuisen, P. Venter, J. Gajewski, Y. Zhang, B. F. Pugh, K. D. Makova, A. Nekrutenko, E. R. Mardis, N. Patterson, T. H. Pringle, F. Chiaromonte, J. C. Mullikin, E. E. Eichler, **R. C. Hardison**, R. A. Gibbs, T. T. Harkins, and V. M. Hayes. Complete Khoisan and Bantu genomes from southern Africa. Nature 463:943-947.

**Hardison, R. C.** Comparative Genomics. In: Human Genetics - Principles and Approaches, 4<sup>th</sup> edition. (F. Vogel, A. Motulsky, S. Antonarakis, and M. Speicher, eds.), pp. 557-588, Springer Publishing, New York, NY.

Iyer, P. R., S. M. Geib, J. Catchmark, **T-h. Kao**, and M. Tien. Genome sequence of a cellulose producing bacterium, *Gluconacetobacter hansenii* ATCC 23769. J. Bacteriol 192:4256-4257.

Fields, A. M., N. Wang, Z. Hua, X. Meng, and **T-h. Kao**. Functional characterization of two chimeric proteins between a *Petunia inflata* S-locus F-box protein, PiSLF<sub>2</sub>, and a PiSLF-like protein, PiSLFLb-S<sub>2</sub>. Plant Mol. Biol. 74:279-292.

Kubo, K-I., T. Entani, A. Takara, N. Wang, A. M. Fields, Z. Hua, M. Toyoda, S-i. Kawashima, T. Ando, A. Isogai, **T-h. Kao**, and S. Takayama. Collaborative non-self recognition in S-RNase-based self-incompatibility. Science 330:796-799.

Hayes, C. S. and **K. C. Keiler**. Ribosome rescue: tmRNA and co-translational processes. FEBS Lett. 584:413-419.

Hughes, H. V., E. Huitema, S. Pritchard, **K. C. Keiler**, Y. V. Brun, and P. H. Viollier. Protein localization and dynamics within a bacterial organelle. Proc. Natl. Acad. Sci. USA 107:5599-5604.

**Keiler, K. C.** and D. M. Lee. *trans*-Translation. In: Recoding: Expansion of Decoding Rules Enriches Gene Expression. (J. F. Atkins and R. F. Gesteland, eds.), pp. 383-405, Springer, New York, NY.

Guevin, C., D. Manna, C. Belanger, **K. V. Konan**, P. Mak, and P. Labonte. Autophagy protein ATG5 interacts transiently with the hepatitis C virus RNA polymerase (NS5B) early during infection. Virology 405:1-7.

Manna, D., J. Aligo, W. D. Heo, H. Koc, C. Xu, and **K. V. Konan**. Endocytic Rab proteins are required for hepatitis C virus replication complex formation. Virology 398:21-37.

Esakova, O. and **A. S. Krasilnikov**. Of proteins and RNA: the RNase P/MRP family. RNA 16: 1725-1747.

Perederina, A. and **A. S. Krasilnikov**. The P3 domain of eukaryotic RNases P/MRP: making a protein-rich RNA-based enzyme. RNA Biol. 7:534-539.

Perederina, A., O. Esakova, C. Quan, E. Khanova, and **A. S. Krasilnikov**. Eukaryotic Ribonucleases P/MRP: the crystal structure of the P3 domain. EMBO J. 29:761-769.

Lu, Q., S. Wierzbicki, **A. S. Krasilnikov**, and M. E. Schmitt. Comparison of mitochondrial and nucleolar RNase MRP reveals identical RNA components with distinct enzymatic activities and protein components. RNA 16:529-537.

Perederina, A., O. Esakova, C. Quan, E. Khanova, and **A. S. Krasilnikov**. Crystallization and preliminary X-ray diffraction analysis of the P3 RNA domain of yeast Ribonuclease MRP in a complex with RNase P/ MRP protein components Pop6 and Pop7. Acta Cryst. F66:76-80.

Chandok, G. S., K. K. Kapoor, R. M. Brick, J. M. Sidorova, and **M. M. Krasilnikova**. A distinct first replication cycle of DNA introduced in mammalian cells. Nucl. Acids Res. 2010:1-13.

Belotserkovskii, B. P., R. Liu, S. Tornaletti, **M. M. Krasilnikova**, S. M. Mirkin, and P. C. Hanawalt. Mechanisms and implications of transcription blockage by guanine-rich DNA sequences. Proc. Natl. Acad. Sci. USA 107:12816-12821.

Ye, S., J. C. Price, E. W. Barr, M. T. Green, J. M. Bollinger, Jr., **C. Krebs**, and F. Neese. Cryoreduction of the NO-adduct of Taurine: $\alpha$ -ketoglutarate dioxygenase (TauD) yields an elusive  $\{\text{FeNO}\}^8$  species. J. Am. Chem. Soc. 132:4739-4751.

Grove, T. L., J. H. Ahlum, P. Sharma, **C. Krebs**, and S. J. Booker. A consensus mechanism for radical SAM-dependent dehydrogenation? BtrN contains two [4Fe-4S] clusters. Biochemistry 49:3783-3785.

Zhang, Y., X. Zhu, A. Torelli, M. Lee, B. Dzikovski, R. M. Koralewski, E. Wang, J. Freed, **C. Krebs**, S. E. Ealick, and H. Lin. Diphthamide biosynthesis requires a SAM-dependent [4Fe-4S]-containing enzyme. Nature 465:891-896.

Jiang, W., J. Xie, P. Varano, **C. Krebs**, and J. M. Bollinger, Jr. Two distinct mechanisms of inactivation of the class Ic ribonucleotide reductase from *Chlamydia trachomatis* by Hydroxyurea: Implications for the protein gating of inter-subunit electron transfer. Biochemistry 49:5340-5349.

Flashman, E., L. M. Hoffart, R. B. Hamed, J. M. Bollinger, Jr., **C. Krebs**, and C. J. Schofield. Evidence for the slow reaction of hypoxia-inducible factor prolyl hydroxylase 2 with oxygen. FEBS J. 277:4089-4099.

Song, W. J., M. S. McCormick, R. K. Behan, M. H. Sazinsky, W. Jiang, J. Lin, **C. Krebs**, and S. J. Lippard. Active site threonine facilitates proton transfer during dioxygen activation at the diiron center of toluene/o-xylene monooxygenase hydroxylase. J. Am. Chem. Soc. 132:13582-13585.

Li, N., V. K. Korboukh, **C. Krebs**, and J. M. Bollinger, Jr. Four-electron oxidation of *p*-hydroxylaminobenzoate to *p*-nitrobenzoate by a peroxodiferric complex in AurF from *Streptomyces thioluteus*. Proc. Natl. Acad. Sci. USA 107:15722-15727.

van der Donk, W. A., **C. Krebs**, and J. M. Bollinger, Jr. Substrate activation by iron superoxo intermediates. Curr. Opin. Struct. Biol. 20:673-683.

Ho, L.-L., X. Wei, T. Shimizu, and **Z.-C. Lai**. Mob as tumor suppressor is activated at the cell membrane to control tissue growth and organ size in *Drosophila*. Dev. Biol. 337:274-283.

Konagurthu, A. S., C. F. Reboul, J. W. Schmidberger, J. A. Irving, **A. M. Lesk**, P. J. Stuckey, J. C. Whisstock, and A. M. Buckle. MUSTANG-MR structural sieving server: applications in protein structural analysis and crystallography. PLoS One 5:e10048.

Konagurthu, A. S. and **A. M. Lesk**. Cataloging topologies of protein folding patterns. J. Mol. Recognit. 23:253-257.

**Lesk, A. M.** Introduction to Protein Science, 2<sup>nd</sup> ed., Oxford University Press, Oxford, UK.

Shen, Q., R. Lal, B. A. Luellen, J. C. Earnheart, A. M. Andrews, and **B. Lüscher**. GABAA receptor deficits cause hypothalamic-pituitary-adrenal axis hyperactivity and antidepressant drug sensitivity characteristic of melancholic depression. Biol. Psychiatry 68:512-520.

Lee, K., R. Porteous, R. E. Campbell, **B. Lüscher**, and A. E. Herbison. Knock-down of GABAA receptor signaling in gonadotropin-releasing hormone (GnRH) neurons has minimal effects upon fertility. Endocrinology 151:4428-4436.

**Lüscher, B.**, Q. Shen, and N. Sahir. The GABAergic deficit hypothesis of major depressive disorder. Mol. Psychiatry, ePub online, 16 November 2010.

Bussard, K. M., N. Okita, N. Sharkey, T. Neuberger, A. Webb, and **A. M. Mastro**. Localization of osteoblast inflammatory cytokines MCP-1 and VEGF to the matrix of the trabecula of the femur, a target area for metastatic breast cancer cell colonization. Clin. Exp. Metast. 27:331-340.

Bussard, K. M., D. J. Venzon, and **A. M. Mastro**. Osteoblasts are a major source of inflammatory cytokines in the tumor microenvironment of bone metastatic breast cancer. J. Cell. Biochem. 111:1138-1148.

Chen, Y.-C., D. M. Sosnoski, and **A. M. Mastro**. Breast cancer metastasis to the bone: mechanisms of bone loss. Breast Cancer Res. 12:215-226.

Afgan, E., D. Baker, N. Coraor, B. Chapman, **A. Nekrutenko**, and J. Taylor. Galaxy CloudMan: delivering cloud compute clusters. BMC Bioinformatics 11 Suppl 12:S4.

Goecks, J., **A. Nekrutenko**, J. Taylor, and The Galaxy Team. Galaxy: a comprehensive approach for supporting accessible, reproducible, and transparent computational research in the life sciences. Genome Biol. 11:R86.

Blankenberg, D., A. Gordon, G. Von Kuster, N. Coraor, J. Taylor, **A. Nekrutenko**, and the Galaxy Team. Manipulation of FASTQ data with Galaxy. Bioinformatics 26:1783-1785.

Bock, C., G. Von Kuster, K. Halachev, J. Taylor, **A. Nekrutenko**, and T. Lengauer. Web-based analysis of (Epi-) genome data using EpiGRAPH and Galaxy. Methods Mol. Biol. 628:275-296.

Schuster, S. C., W. Miller, A. Ratan, L. P. Tomsho, B. Giardine, L. R. Kasson, R. S. Harris, D. C. Petersen, F. Zhao, J. Qi, C. Alkan, J. M. Kidd, Y. Sun, D. I. Drautz, P. Bouffard, D. M. Muzny, J. G. Reid, L. V. Nazareth, Q. Wang, R. Burhans, C. Riemer, N. E. Wittekindt, P. Moorjani, E. A. Tindall, C. G. Danko, W. S. Teo, A. M. Buboltz, Z. Zhang, Q. Ma, A. Oosthuysen, A. W. Steenkamp, H. Oostuisen, P. Venter, J. Gajewski, Y. Zhang, B. F. Pugh, K. D. Makova, **A. Nekrutenko**, E. R. Mardis, N. Patterson, T. H. Pringle, F. Chiaromonte, J. C. Mullikin, E. E. Eichler, R. C. Hardison, R. A. Gibbs, T. T. Harkins, and V. M. Hayes. Complete Khoisan and Bantu genomes from southern Africa. Nature 463:943-947.

Blankenberg, D., G. Von Kuster, N. Coraor, G. Ananda, R. Lazarus, M. Mangan, **A. Nekrutenko**, and J. Taylor. Galaxy: a web-based genome analysis tool for experimentalists. Curr. Protoc. Mol. Biol. 89:19.10.1-19.10.21.

Chen, B., T. A. Sysoeva, S. Chowdhury, L. Guo, S. De Carlo, J. A. Hanson, H. Yang, and **B. T. Nixon**. Engagement of arginine finger to ATP triggers large conformational changes in NtrC1 AAA+ ATPase for remodeling bacterial RNA polymerase. Structure 18:1420-1430.

**Postle, K.**, K. A. Kastead, M. G. Gresock, J. Ghosh, and C. D. Swayne. The TonB dimeric crystal structures do not exist *in vivo*. mBio 1:e00307-10.

Ghosh, S. and **B. F. Pugh**. Sequential recruitment of SAGA and TFIID in a genomic response to DNA damage in *Saccharomyces cerevisiae*. Mol. Cell. Biol. 31:190-202.

Samorodnitsky, E. and **B. F. Pugh**. Genome-wide modeling of transcription preinitiation complex disassembly mechanisms using ChIP-chip data. PLoS Comput. Biol. 6:e1000733.

Schuster, S. C., W. Miller, A. Ratan, L. P. Tomsho, B. Giardine, L. R. Kasson, R. S. Harris, D. C. Petersen, F. Zhao, J. Qi, C. Alkan, J. M. Kidd, Y. Sun, D. I. Drautz, P. Bouffard, D. M. Muzny, J. G. Reid, L. V. Nazareth, Q. Wang, R. Burhans, C. Riemer, N. E. Wittekindt, P. Moorjani, E. A. Tindall, C. G. Danko, W. S. Teo, A. M. Buboltz, Z. Zhang, Q. Ma, A. Oosthuysen, A. W. Steenkamp, H. Oostuisen, P. Venter, J. Gajewski, Y. Zhang, **B. F. Pugh**, K. D. Makova, A. Nekrutenko, E. R. Mardis, N. Patterson, T. H. Pringle, F. Chiaromonte, J. C. Mullikin, E. E. Eichler, R. C. Hardison, R. A. Gibbs, T. T. Harkins, and V. M. Hayes. Complete Khoisan and Bantu genomes from southern Africa. Nature 463:943-947.

Miao, J., Q. Fan, L. Cui, X. Li, H. Wang, G. Ning, **J. C. Reese**, and L. Cui. The MYST family histone acetyltransferase regulates gene expression and cell cycle in malaria parasite *Plasmodium falciparum*. Mol. Microbiol. 78:883-902.

Zheng, S., J. Wyrick, and **J. C. Reese**. Novel trans-tail regulation of H2B ubiquitylation and H3K4 methylation by the N-terminus of Histone H2A. Mol. Cell. Biol. 30:3635-3645.

Krajewski, W.A. and **J. C. Reese**. SET domains of histone methyltransferases recognize ISWI-remodeled nucleosomal species. Mol. Cell. Biol. 30:552-564.

Mattie, F. J., M. M. Stackpole, M. C. Stone, J. R. Clippard, D. A. Rudnick, Y. Qiu, J. Tao, D. L. Allender, M. Parmar, and **M. M. Rolls**. Global upregulation of microtubule dynamics and polarity reversal during regeneration of an axon from a dendrite. Curr. Biol. 20:2169-2177.

Stone, M. C., M. M. Nguyen, J. Tao, D. L. Allender, and **M. M. Rolls**. Global upregulation of microtubule dynamics and polarity reversal during regeneration of an axon from a dendrite. Mol. Biol. Cell 21:767-777.

Oh, S. J. and **L. C. Santy**. Differential effects of cytohesins 2 and 3 on beta1 integrin recycling. J. Biol. Chem. 285:14610-14616.

White, D. T., K. M. McShea, M. A. Attar, and **L. C. Santy**. GRASP and IPCEF promote ARF to Rac signaling and cell migration by coordinating the association of ARNO/cytohesin 2 with Dock 180. Mol. Biol. Cell 21:562-571.

Wittekindt, N. E., A. Padhi, **S. C. Schuster**, J. Qi, F. Zhao, L. P. Tomsho, L. R. Kasson, M. Packard, P. Cross, and M. Poss. Nodeomics: Pathogen detection in vertebrate lymph nodes using meta-transcriptomics. PLoS One 5:e13432.

Schwibbert, K., A. M. Sanguino, I. Bagyan, G. Heidrich, G. Lentzen, H. Seitz, M. Rampp, **S. C. Schuster**, F. Pfeiffer, D. Oesterhelt, and H. J. Kunte. A blueprint of ectoine metabolism from the genome of the industrial producer *Halomonas elongata* DSM 2581T. Environ. Microbiol. doi: 10.1111/j.1462-2920.2010.02336.x.

Kan, Z., B. S. Jaiswal, J. Stinson, V. Janakiraman, D. Bhatt, H. M. Stern, P. Yue, P. M. Haverty, R. Bourgon, J. Zheng, M. Moorhead, S. Chaudhuri, L. P. Tomsho, B. Peters, K. Pujara, S. Cordes, D. P. Davis, V. E. H. Carlton, W. Yuan, L. Li, W. Wang, C. Eigenbrot, J. S. Kaminker, D. A. Eberhard, P. Waring, **S. C. Schuster**, Z. Modrusan, Z. Zhang, D. Stokoe, F. J. de Sauvage, M. Faham, and S. Seshagiri. Diverse somatic mutation patterns and pathway alterations in human cancers. Nature 466:869-873.

**Schuster, S. C.** and V. M. Hayes. Reply: Issues raised by use of ethnic-group names in genome study. Nature 464:487-487.

Ratan, A., Y. Zhang, V. M. Hayes, **S. C. Schuster**, and W. Miller. Calling SNPs without a reference sequence. BMC Bioinformatics 11:130.

Tindall, E. A., D. C. Petersen, S. Nikolaysen, W. Miller, **S. C. Schuster**, and V.M. Hayes. Interpretation of custom designed Illumina genotype cluster plots for targeted association studies and next-generation sequence validation. BMC Res. Notes 3:39.

Lindqvist, C.\*, **S. C. Schuster\***, Y. Sun, S. L. Talbot, J. Qi, A. Ratan, L. P. Tomsho, L. R. McKasson, E. Zey, J. Aars, W. Miller, Ó. Ingólfsson, L. Bachmann, and Ø. Wiig (\*equal contribution). Complete mitochondrial genome of a Pleistocene jawbone unveils the origin of polar bear. Proc. Natl. Acad. Sci. USA 107:5053-5057.

**Schuster, S. C.**, W. Miller, A. Ratan, L. P. Tomsho, B. Giardine, L. R. Kasson, R. S. Harris, D. C. Petersen, F. Zhao, J. Qi, C. Alkan, J. M. Kidd, Y. Sun, D. I. Drautz, P. Bouffard, D. M. Muzny, J. G. Reid, L. V. Nazareth, Q. Wang, R. Burhans, C. Riemer, N. E. Wittekindt, P. Moorjani, E. A. Tindall, C. G. Danko, W. S. Teo, A. M. Buboltz, Z. Zhang, Q. Ma, A. Oosthuysen, A. W. Steenkamp, H. Oostuisen, P. Venter, J. Gajewski, Y. Zhang, B. F. Pugh, K. D. Makova, A. Nekrutenko, E. R. Mardis, N. Patterson, T. H. Pringle, F. Chiaromonte, J. C. Mullikin, E. E. Eichler, R. C. Hardison, R. A. Gibbs, T. T. Harkins, and V. M. Hayes. Complete Khoisan and Bantu genomes from southern Africa. Nature 463:943-947.

Tiburcio, R. A., G. G. Lacerda Costa, M. F. Carazzolle, J. M. Costa Mondego, **S. C. Schuster**, J. E. Carlson, M. J. Guiltinan, B. A. Bailey, P. Mieckowski, L. W. Meinhardt, and G. A. Guimarães Pereira. Genes acquired by horizontal transfer are potentially involved in the evolution of phytopathogenicity in *Moniliophthora perniciosa* and *Moniliophthora roreri*, two of the major pathogens of cacao. J. Mol. Evol. 70:85-97.

Buresh, R. A., S. L. Kuslak, M. A. Rusch, C. M. Vezina, **S. B. Selleck**, and P. C. Marker. Sulfatase 1 is an inhibitor of ductal morphogenesis with sexually dimorphic expression in the urogenital sinus. Endocrinology 151:3420-3431.

Adhikari, N., D. L. Basi, D. Townsend, M. Rusch, A. Mariash, S. Mullegama, A. Watson, J. Larson, S. Tan, B. Lerman, J. D. Esko, **S. B. Selleck**, and J. L. Hall. Heparan sulfate Ndst1 regulates vascular smooth muscle cell proliferation, vessel size and vascular remodeling. J. Mol. Cell. Cardiol. 49:287-293.

Smart, A. D., M. M. Course, J. Rawson, **S. Selleck**, D. Van Vactor, and K. G. Johnson. Heparan sulfate proteoglycan specificity during axon pathway formation in the *drosophila* embryo. Develop. Neurobiol. DOI: 10.1002/dneu.20854.

Makde, R. D., J. R. England, H. P. Yennawar, and **S. Tan**. Structure of RCC1 chromatin factor bound to the nucleosome core particle. Nature 467:562-566.

England, J. R., J. Huang, M. J. Jennings, R. D. Makde, and **S. Tan**. RCC1 uses a conformationally diverse loop region to interact with the nucleosome: a model for the RCC1-nucleosome complex. J. Mol. Biol. 398:518-529.

Choy, J. S., S. Wei, J. Y. Lee, **S. Tan**, S. Chu, and T.-H. Lee. DNA methylation increases nucleosome compaction and rigidity. J. Am. Chem. Soc. 132:1782-1783.

Lee, H. G., D. C. Zarnescu, B. MacIver, and **G. H. Thomas**. The cell adhesion molecular Roughest depends on  $\beta_{\text{Heavy}}$ -spectrin during eye morphogenesis in *Drosophila*. J. Cell Sci. 123:277-285.

Khanna, M. R., B. A. Stanley, and **G. H. Thomas**. Towards a membrane proteome in *Drosophila*: a method for the isolation of plasma membrane. BMC Genomics 11:302.

Ofori-Sarpong, G., **M. Tien**, and K. Osseo-Asare. Myco-hydrometallurgy: Coal model for potential reduction of preg-robbing capacity of carbonaceous gold ores using the fungus, *Phanerochaete chrysosporium*. Hydrometallurgy 102:66-72.

Geib, S. M., **M. Tien**, and K. Hoover. Identification of proteins involved in lignocellulose degradation using in gel zymogram analysis combined with mass spectroscopy-based peptide analysis of gut proteins from larval Asian longhorned beetles, *Anoplophora glabripennis*. Insect Sci. 17:253-264.

Iyer, P. R., S. M. Geib, J. Catchmark, T.-h. Kao, and **M. Tien**. Genome sequence of a cellulose-producing bacterium, *Gluconacetobacter hansenii* ATCC 23769. J. Bacteriol. 192:4256-4257.

Saleem, A. N., Y.-H. Chen, H. J. Baek, Y.-W. Hsiao, H.-W. Huang, H.-J. Kao, K.-M. Liu, L.-F. Shen, I.-W. Song, **C.-P. D. Tu**, J.-Y. Wu, T. Kikuchi, M. J. Justice, J. Yen, and Y.-T. Chen. Mice with alopecia, osteoporosis, and systemic amyloidosis due to mutation in *Zdhhc13*, a gene coding for palmitoyl acyltransferase. PLoS Genet. 6:e1000985.

Akgül, B., K.-W. Lin, H.-M. Ou Yang, Y.-H. Chen, T.-H. Lu, C.-H. Chen, T. Kikuchi, Y.-T. Chen, and **C.-P. D. Tu**. Garlic accelerates red blood cell turnover and splenic erythropoietin gene expression in mice: evidence for erythropoietin-independent erythropoiesis. PLoS One 5: e15358.

Li, P., M. Li, M. R. Lindberg, M. J. Kennett, N. Xiong, and **Y. Wang**. PAD4 is essential for antibacterial innate immunity mediated by neutrophil extracellular traps. J. Exp. Med. 207:1853-1862.

Li, P., D. Wang, H. Yao, P. Doret, G. Hao, Q. Shen, H. Qiu, X. Zhang, Y. Wang, G. Chen, and **Y. Wang**. Coordination of PAD4 and HDAC2 in the regulation of p53 target gene expression. Oncogene 29:3153-3162.

Jin, Y., M. Xia, C. M. Saylor, K. Narayan, J. Kang, D. L. Wiest, **Y. Wang**, and N. Xiong. Intrinsic programming of thymic T cells for specific peripheral tissue localization. J. Immunol. 185:7156-7160.

Chow, O. A., M. von Kockritz-Blickwede, A. T. Bright, M. E. Hensler, A. S. Zinkernagel, A. L. Cogen, R. L. Gallo, M. Monestier, **Y. Wang**, C. K. Glass, and V. Nizet. Statins enhance formation of phagocyte extracellular traps. Cell Host Microbe 18:445-454.

Makde, R. D., J. R. England, **H. P. Yennawar**, and S. Tan. Structure of RCC1 chromatin factor bound to the nucleosome core particle. Nature 467:562-566.

Yennawar, N., S. Denev, V. Gopalan, and **H. Yennawar**. Laser-improved protein crystallization screening. Acta Cryst. F66:969-972.

David, K. Y. L., A.-M. S. Jackson, T. Fushimi, **H. Yennawar**, and H. R. Allcock. Synthesis and inclusion behavior of cyclotriphosphazene molecules with asymmetric spiro rings. Dalton Trans. 39:5341-5348.