

Biochemistry and Biophysics 2016 Publications

Kevin Ahern

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Matt Andrews

Ballinger MA, Hess C, Napolitano MW, Bjork JA, Andrews MT. (2016) [Seasonal changes in brown adipose tissue mitochondria in a mammalian hibernator: from gene expression to function.](#) *Am J Physiol Regul Integr Comp Physiol.* Aug 1;311(2):R325-36. doi: 10.1152/ajpregu.00463.2015.

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Bill Baird

Madeen EP, Ognibene TJ, Corley RA, McQuistan TJ, Henderson MC, Baird WM, Bench G, Turteltaub KW, Williams DE. (2016) [Human Microdosing with Carcinogenic Polycyclic Aromatic Hydrocarbons: In Vivo Pharmacokinetics of Dibenzo\[def,p\]chrysene and Metabolites by UPLC Accelerator Mass Spectrometry.](#) *Chem Res Toxicol.* Oct 17;29(10):1641-1650.

Elisar Barbar

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Joe Beckman

Trias E, Ibarburu S, Barreto-Núñez R, Babdor J, Maciel TT, Guillo M, Gros L, Dubreuil P, Díaz-Amarilla P, Cassina P, Martínez-Palma L, Moura IC, **Beckman JS**, Hermine O, Barbeito L. (2016) [Post-paralysis tyrosine kinase inhibition with masitinib abrogates neuroinflammation and slows disease progression in inherited amyotrophic lateral sclerosis.](#) *J Neuroinflammation*. Jul 11;13(1):177. doi: 10.1186/s12974-016-0620-9.

Williams JR, Trias E, Beilby PR, Lopez NI, Labut EM, Bradford CS, Roberts BR, McAllum EJ, Crouch PJ, Rhoads TW, Pereira C, Son M, Elliott JL, Franco MC, Estévez AG, Barbeito L, **Beckman JS** (2016) Copper delivery to the CNS by CuATSM effectively treats motor neuron disease in SOD(G93A) mice co-expressing the Copper-Chaperone-for-SOD. *Neurobiol Dis*. May;89:1-9. doi: 10.1016/j.nbd.2016.01.020.

Rick Cooley

Cooley RB, O'Donnell JP, Sondermann H. (2016) [Coincidence detection and bi-directional transmembrane signaling control a bacterial second messenger receptor.](#) *Elife*. Dec 21;5. pii: e21848. doi: 10.7554/eLife.21848.

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Balz Frei

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Michael Freitag

- Qi Z, Smith KM, Bredeweg EL, Bosnjak N, **Freitag M**, Nargang FE. (2016) [Alternative Oxidase Transcription Factors AOD2 and AOD5 of Neurospora crassa Control the Expression of Genes Involved in Energy Production and Metabolism.](#) *G3 (Bethesda)*. Dec 16. pii: g3.116.035402. doi: 10.1534/g3.116.035402. [Epub ahead of print]
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- Studt L, Rösler SM, Burkhardt I, Arndt B, **Freitag M**, Humpf HU, Dickschat JS, Tudzynski B. (2016) [Knock-down of the methyltransferase Kmt6 relieves H3K27me3 and results in induction of cryptic and otherwise silent secondary metabolite gene clusters in Fusarium fujikuroi.](#) *Environ Microbiol*. Nov;18(11):4037-4054. doi: 10.1111/1462-2920.13427.
- Galazka JM, Klocko AD, Uesaka M, Honda S, Selker EU, **Freitag M**. (2016) [Neurospora chromosomes are organized by blocks of importin alpha-dependent heterochromatin that are largely independent of H3K9me3.](#) *Genome Res*. Aug;26(8):1069-80. doi: 10.1101/gr.203182.115.
- Freitag M**. (2016) [The kinetochore interaction network \(KIN\) of ascomycetes.](#) *Mycologia*. 2016 May-Jun;108(3):485-505. doi: 10.3852/15-182. Review.

Fritz Gombart

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Julie Greenwood

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Tory Hagen

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David Hendrix

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Bekelis K, Kerley-Hamilton JS, Teegarden A, Tomlinson CR, Kuintzle R, Simmons N, Singer RJ, Roberts DW, Kellis M, **Hendrix DA**. (2016) [MicroRNA and gene expression changes in unruptured human cerebral aneurysms.](#) *J Neurosurg*. Dec;125(6):1390-1399.

Victor Hsu

Yang L, Broderick D, Campbell Y, Gombart AF, Stevens JF, Jiang Y, **Hsu VL**, Bisson WH, Maier CS. (2016) [Conformational modulation of the farnesoid X receptor by prenylflavonoids: Insights from hydrogen deuterium exchange mass spectrometry \(HDX-MS\), fluorescence titration and molecular docking studies.](#) *Biochim Biophys Acta*. Dec;1864(12):1667-1677. doi: 10.1016/j.bbapap.2016.08.019.

Pat Iversen

Warren TK, Whitehouse CA, Wells J, Welch L, Charleston JS, Heald A, Nichols DK, Mattix ME, Palacios G, Kugleman JR, **Iversen PL**, Bavari S. (2016) [Delayed Time-to-Treatment of an Antisense Morpholino Oligomer Is Effective against Lethal Marburg Virus Infection in Cynomolgus Macaques.](#) *PLoS Negl Trop Dis*. Feb 22;10(2):e0004456. doi: 10.1371/journal.pntd.0004456.

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Colin Johnson

Codding SJ, Marty N, Abdullah N, **Johnson CP**. (2016) [Dysferlin Binds SNAREs \(Soluble N-Ethylmaleimide-sensitive Factor \(NSF\) Attachment Protein Receptors\) and Stimulates Membrane Fusion in a Calcium-sensitive Manner](#). *J Biol Chem*. Jul 8;291(28):14575-84. doi: 10.1074/jbc.M116.727016.

Andy Karplus

Perkins A, Parsonage D, Nelson KJ, Ogba OM, Cheong PH, Poole LB, **Karplus PA**. (2016) [Peroxiredoxin Catalysis at Atomic Resolution](#). *Structure*. Oct 4;24(10):1668-1678. doi: 10.1016/j.str.2016.07.012.

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Hollingsworth SA, Lewis MC, **Karplus PA**. (2016) [Beyond basins: \$\phi, \psi\$ preferences of a residue depend heavily on the \$\phi, \psi\$ values of its neighbors](#). *Protein Sci*. 2016 Sep;25(9):1757-62. doi: 10.1002/pro.2973.

Moriarty NW, Tronrud DE, Adams PD, **Karplus PA**. (2016) [A new default restraint library for the protein backbone in Phenix: a conformation-dependent geometry goes mainstream](#). *Acta Crystallogr D Struct Biol*. Jan;72(Pt 1):176-9. doi: 10.1107/S2059798315022408.

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Chris Mathews

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Ryan Mehl

Gu X, Wu Z, Huang Y, Wagner MA, Baleanu-Gogonea C, **Mehl RA**, Buffa JA, DiDonato AJ, Hazen LB, Fox PL, Gogonea V, Parks JS, DiDonato JA, Hazen SL. (2016) [A Systematic Investigation of Structure/Function Requirements for the Apolipoprotein A-I/Lecithin Cholesterol Acyltransferase Interaction Loop of High-density Lipoprotein](#). *J Biol Chem*. Mar 18;291(12):6386-95. doi: 10.1074/jbc.M115.696088.

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Gary Merrill

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Afua Nyarko

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Viviana Perez

Zhang Y, Liu Y, Walsh M, Bokov A, Ikeno Y, Jang YC, **Perez VI**, Van Remmen H, Richardson A. (2016) [Liver specific expression of Cu/ZnSOD extends the lifespan of Sod1 null mice](#). *Mech Ageing Dev*. Mar;154:1-8. doi: 10.1016/j.mad.2016.01.005.

Watson GW, Wickramasekara S, Fang Y, Maier CS, Williams DE, Dashwood RH, **Perez VI**, Ho E. (2016) [HDAC6 activity is not required for basal autophagic flux in metastatic prostate cancer cells](#). *Exp Biol Med (Maywood)*. Jun;241(11):1177-85. doi: 10.1177/1535370215618518.

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Indira Rajagopal

Ahern K, **Rajagopal I**, Tan T (2016) *Biochemistry Free For All*

Weijian Zhang

Li C, **Zhang WJ**, Choi J, Frei B. (2016) [Quercetin affects glutathione levels and redox ratio in human aortic endothelial cells not through oxidation but formation and cellular export of quercetin-glutathione conjugates and upregulation of glutamate-cysteine ligase.](#) *Redox Biol.* Oct;9:220-228. doi: 10.1016/j.redox.2016.08.012.

Li C, **Zhang WJ**, Frei B. (2016) [Quercetin inhibits LPS-induced adhesion molecule expression and oxidant production in human aortic endothelial cells by p38-mediated Nrf2 activation and antioxidant enzyme induction.](#) *Redox Biol.* Oct;9:104-113. doi: 10.1016/j.redox.2016.06.006.