

Publications by B RTP Students 2006-2011

Peer-reviewed publications in journals covered by PubMed (excludes book chapters and some journals). B RTP students are indicated by **boldface** type.

2006:

Boer B, Bernadt CT, Desler M, Wilder PJ, **Kopp JL**, Rizzino A., Differential activity of the FGF-4 enhancer in F9 and P19 embryonal carcinoma cells. *J Cell Physiol.* 2006 Jul;208(1):97-108.

Chakravarti D, Zahid M, Backora M, **Myers EM**, Gaikwad N, Weisenburger DD, Cavalieri EL, Rogan EG, Joshi SS., Ortho-quinones of benzene and estrogens induce hyperproliferation of human peripheral blood mononuclear cells. *Leuk Lymphoma.* 2006 Dec;47(12):2635-44.

Bean L, Zheng H, Patel KP, Monaghan DT., Regional variations in NMDA receptor downregulation in streptozotocin-diabetic rat brain. *Brain Res.* 2006 Oct 18;1115(1):217-22.

Dhar A, **Gardner J**, Borgmann K, Wu L, Ghorpade A., Novel role of TGF-beta in differential astrocyte-TIMP-1 regulation: implications for HIV-1-dementia and neuroinflammation. *J Neurosci Res.* 2006 May 15;83(7):1271-80.

Gardner J, Borgmann K, Deshpande MS, Dhar A, Wu L, Persidsky R, Ghorpade A., Potential mechanisms for astrocyte-TIMP-1 downregulation in chronic inflammatory diseases. *J Neurosci Res.* 2006 May 15;83(7):1281-92.

Peng H, Erdmann N, **Whitney N**, Dou H, Gorantla S, Gendelman HE, Ghorpade A, Zheng J., HIV-1-infected and/or immune activated macrophages regulate astrocyte SDF-1 production through IL-1beta. *Glia.* 2006 Nov 1;54(6):619-29.

2007:

Boer B, **Kopp J**, Mallanna S, Desler M, Chakravarthy H, Wilder PJ, Bernadt C, Rizzino A., Elevating the levels of Sox2 in embryonal carcinoma cells and embryonic stem cells inhibits the expression of Sox2:Oct-3/4 target genes. *Nucleic Acids Res.* 2007

Kopp JL, Wilder PJ, Desler M, Kinarsky L, Rizzino A., Different domains of the

- transcription factor ELF3 are required in a promoter-specific manner and multiple domains control its binding to DNA. *J Biol Chem.* 2007 Feb 2;282(5):3027-41.
- Laurie C, Reynolds A**, Coskun O, Bowman E, Gendelman HE, Mosley RL., CD4+ T cells from Copolymer-1 immunized mice protect dopaminergic neurons in the 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine model of Parkinson's disease. *J Neuroimmunol.* 2007 Feb;183(1-2):60-8.
- Thomas MP, Chartrand K, **Reynolds A**, Vitvitsky V, Banerjee R, Gendelman HE., Ion channel blockade attenuates aggregated alpha synuclein induction of microglial reactive oxygen species: relevance for the pathogenesis of Parkinson's disease. *J Neurochem.* 2007 Jan;100(2):503-19.
- Kozisek ME**, Deupree JD, Burke WJ, Bylund DB., Appropriate dosing regimens for treating juvenile rats with desipramine for neuropharmacological and behavioral studies. *J Neurosci Methods.* 2007
- Bailey JM**, Singh PK and Hollingsworth MA (2007) Cancer metastasis facilitated by developmental pathways: Sonic hedgehog, Notch, and bone morphogenic proteins. *J Cell Biochem* **102**:829-839.
- Batrakova EV, Li S, **Reynolds AD**, Mosley RL, Bronich TK, Kabanov AV and Gendelman HE (2007) A macrophage-nanozyme delivery system for Parkinson's disease. *Bioconjug Chem* **18**:1498-1506.
- Benner EJ, Banerjee R, **Reynolds AD**, Sherman S, Pisarev VM, Tshiperson V, Nemachek C, Ciborowski P, Przedborski S, Mosley RL and Gendelman HE (2008) Nitrated alpha-Synuclein Immunity Accelerates Degeneration of Nigral Dopaminergic Neurons. *PLoS ONE* **3**:e1376.
- Bylund DB and **Reed AL** (2007) Childhood and adolescent depression: why do children and adults respond differently to antidepressant drugs? *Neurochem Int* **51**:246-253.
- Curtis MW**, Ly QP, Wheelock MJ and Johnson KR (2007) Evidence that the V832M E-cadherin germ-line missense mutation does not influence the affinity of alpha -catenin for the cadherin/catenin complex. *Cell Commun Adhes* **14**:45-55.
- Deupree JD, **Montgomery MD** and Bylund DB (2007a) Pharmacological properties of the active metabolites of the antidepressants desipramine and citalopram. *Eur J Pharmacol* **576**:55-60.

- Deupree JD, **Reed AL** and Bylund DB (2007b) Differential effects of the tricyclic antidepressant desipramine on the density of adrenergic receptors in juvenile and adult rats. *J Pharmacol Exp Ther* **321**:770-776.
- Donohue TM, **Curry-McCoy TV**, Nanji AA, Kharbanda KK, Osna NA, Radio SJ, Todero SL, White RL, Casey CA., Lysosomal leakage and lack of adaptation of hepatoprotective enzyme contribute to enhanced susceptibility to ethanol-induced liver injury in female rats. *Alcohol Clin Exp Res.* 2007 Nov;31(11):1944-52.
- Donohue TM Jr, **Curry-McCoy TV**, Todero SL, White RL, Kharbanda KK, Nanji AA, Osna NA., L-Buthionine (S,R) sulfoximine depletes hepatic glutathione but protects against ethanol-induced liver injury., *Alcohol Clin Exp Res.* 2007 Jun;31(6):1053-60.
- Grimm PR**, Foutz RM, Brenner R and Sansom SC (2007) Identification and localization of BK-beta subunits in the distal nephron of the mouse kidney. *Am J Physiol Renal Physiol* **293**:F350-359.
- Grimm PR** and Sansom SC (2007) BK channels in the kidney. *Curr Opin Nephrol Hypertens* **16**:430-436.
- Handke LD, Slater SR, Conlon KM, O'Donnell ST, Olson ME, **Bryant KA**, Rupp ME, O'Gara JP and Fey PD (2007) SigmaB and SarA independently regulate polysaccharide intercellular adhesin production in *Staphylococcus epidermidis*. *Can J Microbiol* **53**:82-91.
- Irvine E**, Keblesh J, Liu J and Xiong H (2007) Voltage-gated potassium channel modulation of neurotoxic activity in human immunodeficiency virus type-1(HIV-1)-infected macrophages. *J Neuroimmune Pharmacol* **2**:265-269.
- Kassel KM**, Dodmane PR, Schulte NA and Toews ML (2008a) Lysophosphatidic acid induces rapid and sustained decreases in epidermal growth factor binding via different signaling pathways in BEAS-2B airway epithelial cells. *J Pharmacol Exp Ther.*
- Kassel KM**, Schulte NA, Parker SM, Lanik AD and Toews ML (2007) Lysophosphatidic acid decreases epidermal growth factor receptor binding in airway epithelial cells. *J Pharmacol Exp Ther* **323**:109-118.
- Reynolds A, Laurie C**, Mosley RL and Gendelman HE (2007a) Oxidative stress and the pathogenesis of neurodegenerative disorders. *Int Rev Neurobiol* **82**:297-325.

Reynolds AD, Banerjee R, Liu J, Gendelman HE and Mosley RL (2007b) Neuroprotective activities of CD4+CD25+ regulatory T cells in an animal model of Parkinson's disease. *J Leukoc Biol* **82**:1083-1094.

Rice KC, **Mann EE**, Endres JL, Weiss EC, Cassat JE, Smeltzer MS and Bayles KW (2007) The cidA murein hydrolase regulator contributes to DNA release and biofilm development in Staphylococcus aureus. *Proc Natl Acad Sci U S A* **104**:8113-8118.

Joshi AD, **Clark EM**, Wang P, Munger CM, Hegde GV, Sanderson S, Dave HP, Joshi SS. Immunotherapy of human neuroblastoma using umbilical cord blood-derived effector cells. *J Neuroimmune Pharmacol*. 2007 Jun;2(2):202-12.

Shlyakhtenko LS, **Gilmore J**, Portillo A, Tamulaitis G, Siksnyš V, Lyubchenko YL. Direct visualization of the EcoRII-DNA triple synaptic complex by atomic force microscopy. *Biochemistry*. 2007 Oct 2;46(39):11128-36.

2008:

Bailey JM, Swanson BJ, Hamada T, Eggers JP, Singh PK, Caffery T, Ouellette MM, Hollingsworth MA. Sonic hedgehog promotes desmoplasia in pancreatic cancer. *Clin Cancer Res*. 2008 Oct 1;14(19):5995-6004.

Banerjee R, Mosley RL, **Reynolds AD**, Dhar A, Jackson-Lewis V, Gordon PH, Przedborski S, Gendelman HE. Adaptive immune neuroprotection in G93A-SOD1 amyotrophic lateral sclerosis mice. *PLoS ONE*. 2008 Jul 23;3(7):e2740.

Curtis MW, Johnson KR, Wheelock MJ. E-cadherin/catenin complexes are formed cotranslationally in the endoplasmic reticulum/Golgi compartments. *Cell Commun Adhes*. 2008 Nov;15(4):365-78.

Foutz RM, **Grimm PR**, Sansom SC. Insulin increases the activity of mesangial BK channels through MAPK signaling. *Am J Physiol Renal Physiol*. 2008 Jun;294(6):F1465-72.

Handke LD, Rogers KL, Olson ME, Somerville GA, Jerrells TJ, Rupp ME, Dunman PM, Fey PD. Staphylococcus epidermidis saeR is an effector of anaerobic growth and a mediator of acute inflammation. *Infect Immun*. 2008 Jan;76(1):141-52.

- Kassel KM**, Wyatt TA, Panettieri RA, Jr. and Toews ML (2008b) Inhibition of human airway smooth muscle cell proliferation by beta 2-adrenergic receptors and cAMP is PKA independent: evidence for EPAC involvement. *Am J Physiol Lung Cell Mol Physiol* **294**:L131-138.
- Kellezi A, **Grosely R**, Kieken F, Borgstahl GE, Sorgen PL. Purification and reconstitution of the connexin43 carboxyl terminus attached to the 4th transmembrane domain in detergent micelles. *Protein Expr Purif.* 2008 Jun; 59(2):215-22.
- Kopp JL**, Ormsbee BD, Desler M and Rizzino A (2008) Small Increases in the Level of Sox2 Trigger the Differentiation of Mouse Embryonic Stem Cells. *Stem Cells*.
- Luke, TM** and T.D. Hexum, UTP and ATP increase extracellular signal-regulated kinase 1/2 phosphorylation in bovine chromaffin cells through epidermal growth factor receptor transactivation. *Purinergic Signal.* 2008 Dec;4(4):323-30.
- Luke, TM** and T.D. Hexum, Tyrosine hydroxylase phosphorylation increases in response to ATP and neuropeptide Y co-stimulation of ERK2 phosphorylation. *Pharmacol Res.* 2008 Jul;58(1):52-7.
- Peng H, **Whitney N**, Wu Y, Tian C, Dou H, Zhou Y, Zheng J. HIV-1-infected and/or immune-activated macrophage-secreted TNF-alpha affects human fetal cortical neural progenitor cell proliferation and differentiation. *Glia.* 2008 Jun;56(8):903-16.
- Potula R, Ramirez SH, Knipe B, Leibhart J, Schall K, Heilman D, Morsey B, **Mercer A**, Papugani A, Dou H, Persidsky Y. Peroxisome proliferator-activated receptor-gamma activation suppresses HIV-1 replication in an animal model of encephalitis. *AIDS.* 2008 Aug 20;22(13):1539-49.
- Quest D, **Dempsey K**, Shafiullah M, Bastola D, Ali H., MTAP: the motif tool assessment platform. *BMC Bioinformatics.* 2008 Aug 12;9 Suppl 9:S6.
- Reed AL**, Happe HK, Petty F and Bylund DB (2008) Juvenile rats in the forced-swim test model the human response to antidepressant treatment for pediatric depression. *Psychopharmacology (Berl).* 2008 Apr;197(3):433-41.
- Reynolds AD**, Glanzer JG, Kadiu I, Ricardo-Dukelow M, Chaudhuri A, Ciborowski P, Cerny R, Gelman B, Thomas MP, Mosley RL and Gendelman HE (2008a) Nitrated alpha-synuclein-activated microglial profiling for Parkinson's disease. *J Neurochem* **104**:1504-1525.

Reynolds AD, Kadiu I, Garg SK, Glanzer JG, **Nordgren T**, Ciborowski P, Banerjee R and Gendelman HE (2008b) Nitrated Alpha-Synuclein and Microglial Neuroregulatory Activities. *J Neuroimmune Pharmacol*.

Whitney, N.P., Peng, H., Erdmann, N.B., Monaghan, D.T., and Zheng, J.C. Activation of AMPA receptors with Q/R-unedited GluR2 induces the differentiation of human neural progenitor cells to neurons. *FASEB* 2008 Aug;22(8):2888-900.

Singh PK, Behrens ME, Eggers JP, Cerny RL, **Bailey JM**, Shanmugam K, Gendler SJ, Bennett EP, Hollingsworth MA. Phosphorylation of MUC1 by Met modulates interaction with p53 and MMP1 expression. *J Biol Chem*. 2008 Oct 3;283(40):26985-95.

Troncoso Brindeiro CM, Fallet RW, Lane PH, Carmines PK. Potassium channel contributions to afferent arteriolar tone in normal and diabetic rat kidney. *Am J Physiol Renal Physiol*. 2008 Jul;295(1):F171-8.

Yan Y, Black CP, Cao PT, Haferbier JL, **Kolb RH**, Spieker RS, Ristow AM, Cowan KH. Gamma-irradiation-induced DNA damage checkpoint activation involves feedback regulation between extracellular signal-regulated kinase 1/2 and BRCA1. *Cancer Res*. 2008 Jul 1;68(13):5113-21.

Zietlow L, Bessho T. DNA polymerase I-mediated translesion synthesis in RecA-independent DNA interstrand cross-link repair in *E. coli*. *Biochemistry*. 2008 May 13;47(19):5460-4.

Hegde GV, **Meyers-Clark E**, Joshi SS, Sanderson SD. A conformationally-biased, response-selective agonist of C5a acts as a molecular adjuvant by modulating antigen processing and presentation activities of human dendritic cells. *Int Immunopharmacol*. 2008 Jun;8(6):819-27. Epub 2008 Mar 3.

2009:

Cordes CM, Bennett RG, Siford GL, Hamel FG. Nitric oxide inhibits insulin-degrading enzyme activity and function through S-nitrosylation. *Biochem Pharmacol*. 2009 Mar 15;77(6):1064-73.

Kassel KM, Schulte NA, Toews ML. Modulation of Epidermal Growth Factor Receptor Binding to Human Airway Smooth Muscle Cells by Glucocorticoids and Beta-2 Adrenergic Receptor Agonists. *Am J Physiol Lung Cell Mol Physiol*. 2009 Feb 6. [Epub ahead of print]

- Liu J, Gong N, Huang X, **Reynolds AD**, Mosley RL, Gendelman HE. Neuromodulatory activities of CD4+CD25+ regulatory T cells in a murine model of HIV-1-associated neurodegeneration. *J Immunol*. 2009 Mar 15;182(6):3855-65.
- Stone DK, **Reynolds AD**, Mosley RL, Gendelman HE. Innate and Adaptive Immunity for the Pathobiology of Parkinson's Disease. *Antioxid Redox Signal*. 2009 Feb 25. [Epub ahead of print]
- Whitney NP, Eidem TM**, Peng H, Huang Y, Zheng JC. Inflammation mediates varying effects in neurogenesis: Relevance to the pathogenesis of brain injury and neurodegenerative disorders. *J Neurochem*. 2009 Jan 19.
- Ramirez S.H., Potula R., Fan S., **Eidem T.**, Papugani A., Reichenbach N., Dykstra H., Weksler B.B., Romero I.A., Couraud P.O., Persidsky Y. (2009) Methamphetamine disrupts blood-brain barrier function by induction of oxidative stress in brain endothelial cells. *J Cereb Blood Flow Metab*, 29, 1933-45.
- Curry-McCoy TV**, Osna NA, Donohue TM Jr., Modulation of lysozyme function and degradation after nitration with peroxynitrite. *Biochim Biophys Acta*. 2009 Aug;1790(8):778-86.
- Wei P, **Grimm PR**, Settles DC, Balwanz CR, Padanilam BJ, Sansom SC. Simvastatin reverses podocyte injury but not mesangial expansion in early stage type 2 diabetes mellitus. *Ren Fail*. 2009;31(6):503-13.
- Grimm PR, Irsik DL**, Settles DC, Holtzclaw JD, Sansom SC., Hypertension of *Kcnmb1-/-* is linked to deficient K secretion and aldosteronism., *Proc Natl Acad Sci U S A*. 2009 Jul 14;106(28):11800-5
- Grimm PR, Irsik DL**, Liu L, Holtzclaw JD, Sansom SC., Role of BKbeta1 in Na+ reabsorption by cortical collecting ducts of Na+-deprived mice. *Am J Physiol Renal Physiol*. 2009 Aug;297(2):F420-8.
- Zietlow L**, Smith LA, Bessho M, Bessho T., Evidence for the involvement of human DNA polymerase N in the repair of DNA interstrand cross-links., *Biochemistry*. 2009 Dec 15;48(49):11817-24.
- Nowacek A, **Kosloski LM**, Gendelman HE., Neurodegenerative disorders and nanoformulated drug development. *Nanomedicine (Lond)*. 2009 Jul;4(5):541-55.
- Tuli A, Sharma M, **Capek HL**, Naslavsky N, Caplan S, Solheim JC. Mechanism for amyloid precursor-like protein 2 enhancement of major histocompatibility

complex class I molecule degradation. *J Biol Chem.* 2009 Dec 4;284(49):34296-307.

Tuli A, Sharma M, Wang X, Simone LC, **Capek HL**, Cate S, Hildebrand WH, Naslavsky N, Caplan S, Solheim JC. Amyloid precursor-like protein 2 association with HLA class I molecules. *Cancer Immunol Immunother.* 2009 Sep;58(9):1419-31.

Lin X, Wang X, **Capek HL**, Simone LC, Tuli A, Morris CR, Reber AJ, Solheim JC. Effect of invariant chain on major histocompatibility complex class I molecule expression and stability on human breast tumor cell lines. *Cancer Immunol Immunother.* 2009 May;58(5):729-36.

Chao C, Ghorpade A. Production and Roles of Glial Tissue Inhibitor of Metalloproteinases-1 in Human Immunodeficiency Virus-1-Associated Dementia Neuroinflammation: A Review. *Am J Infect Dis.* 2009;5(4):314-320.

Roy L, McDonald CA, Jiang C, Maroni D, Zeleznik AJ, Wyatt TA, Hou X, Davis JS., Convergence of 3',5'-cyclic adenosine 5'-monophosphate/protein kinase A and glycogen synthase kinase-3beta/beta-catenin signaling in corpus luteum progesterone synthesis., *Endocrinology.* 2009 Nov;150(11):5036-45.

Reed AL, Anderson JC, Bylund DB, Petty F, El Refaey H, Happe HK., Treatment with escitalopram but not desipramine decreases escape latency times in a learned helplessness model using juvenile rats., *Psychopharmacology (Berl).* 2009 Aug;205(2):249-59.

Eggert D, Dash PK, Serradji N, Dong CZ, Clayette P, Heymans F, Dou H, Gorantla S, Gelbard HA, Poluektova L, Gendelman HE., Development of a platelet-activating factor antagonist for HIV-1 associated neurocognitive disorders. *J Neuroimmunol.* 2009 Aug 18;213(1-2):47-59.

Huang X, **Reynolds AD**, Mosley RL, Gendelman HE. , CD 4+ T cells in the pathobiology of neurodegenerative disorders. *J Neuroimmunol.* 2009 Jun 25;211(1-2):3-15.

Reynolds AD, Stone DK, Mosley RL, Gendelman HE. , Proteomic studies of nitrated alpha-synuclein microglia regulation by CD4+CD25+ T cells. *J Proteome Res.* 2009 Jul;8(7):3497-511.

Reynolds AD, Stone DK, Mosley RL, Gendelman HE. , Nitrate {alpha}-synuclein-induced alterations in microglial immunity are regulated by CD4+ T cell subsets. *J Immunol.* 2009 Apr 1;182(7):4137-49.

Wu Y, Peng H, Cui M, **Whitney NP**, Huang Y, Zheng JC. , CXCL12 increases human neural progenitor cell proliferation through Akt-1/FOXO3a signaling pathway. *J Neurochem.* 2009 May;109(4):1157-67.

Bailey JM, Creamer BA, Hollingsworth MA. , What a fish can learn from a mouse: principles and strategies for modeling human cancer in mice. *Zebrafish.* 2009 Dec;6(4):329-37.

Bailey JM, **Mohr AM**, Hollingsworth MA., Sonic hedgehog paracrine signaling regulates metastasis and lymphangiogenesis in pancreatic cancer. *Oncogene.* 2009 Oct 8;28(40):3513-25.

Gilmore JL, Suzuki Y, Tamulaitis G, Siksny V, Takeyasu K, Lyubchenko YL. , Single-molecule dynamics of the DNA-EcoRII protein complexes revealed with high-speed atomic force microscopy. *Biochemistry.* 2009 Nov 10;48(44):10492-8.

Shlyakhtenko LS, **Gilmore J**, Kriatchko AN, Kumar S, Swanson PC, Lyubchenko YL. Molecular mechanism underlying RAG1/RAG2 synaptic complex formation. *J Biol Chem.* 2009 Jul 31;284(31):20956-65.

Mann EE, Rice KC, Boles BR, Endres JL, Ranjit D, Chandramohan L, Tsang LH, Smeltzer MS, Horwill AR, Bayles KW. , Modulation of eDNA release and degradation affects *Staphylococcus aureus* biofilm maturation. *PLoS One.* 2009 Jun 9;4(6):e5822.

Sharma-Kuinkel BK, **Mann EE**, Ahn JS, Kuechenmeister LJ, Dunman PM, Bayles KW. , The *Staphylococcus aureus* LytSR two-component regulatory system affects biofilm formation. *J Bacteriol.* 2009 Aug;191(15):4767-75.

Haider NB, **Mollema N**, Gaule M, Yuan Y, Sachs AJ, Nystuen AM, Naggert JK, Nishina PM., Nr2e3-directed transcriptional regulation of genes involved in photoreceptor development and cell-type specific phototransduction. *Exp Eye Res.* 2009 Sep;89(3):365-72.

2010

Bryant KA, Kinkead LC, Larson MA, Hinrichs SH, Fey PD., Genetic analysis of the *Staphylococcus epidermidis* macromolecular synthesis operon: Serp1129 is an ATP binding protein and sigA transcription is regulated by

both sigma(A)- and sigma(B)-dependent promoters., BMC Microbiol. 2010 Jan 12;10:8.

Reynolds AD, Stone DK, **Hutter JA**, Benner EJ, Mosley RL, Gendelman HE., Regulatory T cells attenuate th17 cell-mediated nigrostriatal dopaminergic neurodegeneration in a model of Parkinson's disease. J Immunol. 2010 Mar 1;184(5):2261-71.

Montgomery MD, Bylund DB. , Lack of effect of the alpha(2C)-adrenoceptor Del322-325 polymorphism on inhibition of cyclic AMP production in HEK293 cells. Br J Pharmacol. 2010 Feb;159(4):820-30.

Ramirez SH, Fan S, Zhang M, Papugani A, Reichenbach N, Dykstra H, **Mercer AJ**, Tuma RF, Persidsky Y., Inhibition of glycogen synthase kinase 3beta (GSK3beta) decreases inflammatory responses in brain endothelial cells. Am J Pathol. 2010 Feb;176(2):881-92.

Sadanandam A, **Rosenbaugh EG**, Singh S, Varney M, Singh RK. , Semaphorin 5A promotes angiogenesis by increasing endothelial cell proliferation, migration, and decreasing apoptosis. Microvasc Res. 2010 Jan;79(1):1-9.

Eggert D, Dash PK, Gorantla S, Dou H, Schifitto G, Maggirwar SB, Dewhurst S, Poluektova L, Gelbard HA, Gendelman HE. , Neuroprotective activities of CEP-1347 in models of neuroAIDS. J Immunol. 2010 Jan 15;184(2):746-56.

Grosely R, Kieken F, Sorgen PL. Optimizing the solution conditions to solve the structure of the Connexin43 carboxyl terminus attached to the 4(th) transmembrane domain in detergent micelles. Cell Commun Adhes. 2010 Apr;17(2):23-33.

Curry-McCoy TV, Osna NA, Nanji AA, Donohue TM Jr., Chronic ethanol consumption results in atypical liver injury in copper/zinc superoxide dismutase deficient mice. Alcohol Clin Exp Res. 2010 Feb;34(2):251-61.

Haverland N, Pottiez G, Wiederin J, Ciborowski P. Immunoreactivity of anti-gelsolin antibodies: implications for biomarker validation. J Transl Med. 2010 Dec 20;8:137.

Pottiez G, **Haverland N**, Ciborowski P. Mass spectrometric characterization of gelsolin isoforms. Rapid Commun Mass Spectrom. 2010 Sep 15;24(17):2620-4.

Jacobs AC, Hood I, Boyd KL, Olson PD, Morrison JM, Carson S, Sayood K,

Iwen PC, Skaar EP, Dunman PM. Inactivation of phospholipase D diminishes *Acinetobacter baumannii* pathogenesis. *Infect Immun*. 2010 May; 78(5):1952-62.

Hood MI, **Jacobs AC**, Sayood K, Dunman PM, Skaar EP. *Acinetobacter baumannii* increases tolerance to antibiotics in response to monovalent cations. *Antimicrob Agents Chemother*. 2010 Mar; 54(3):1029-41.

Grimm PR, Sansom SC. BK channels and a new form of hypertension. *Kidney Int*. 2010 Nov;78(10):956-62.

Holtzclaw JD, Liu L, **Grimm PR**, Sansom SC. Shear Stress-induced volume decrease in C11-MDCK cells by BK-alpha/beta4. *Am J Physiol Renal Physiol*. 2010 Sep;299(3):F507-16.

Holtzclaw JD, **Grimm PR**, Sansom SC. Intercalated cell BK-alpha/beta4 channels modulate sodium and potassium handling during potassium adaptation. *J Am Soc Nephrol*. 2010 Apr;21(4):634-45.

Rosenbaugh EG, Roat JW, Gao L, Yang RF, Manickam DS, Yin JX, Schultz HD, Bronich TK, Batrakova EV, Kabanov AV, Zucker IH, Zimmerman MC. The attenuation of central angiotensin II-dependent pressor response and intra-neuronal signaling by intracarotid injection of nanoformulated copper/zinc superoxide dismutase. *Biomaterials*. 2010 Jul;31(19):5218-26.

Saunders JA, **Kosloski LM**, McMillan JM, Yotam N, Rinat T, Mosley RL, Gendelman HE. BL-1023 improves behavior and neuronal survival in 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-intoxicated mice. *Neuroscience*. 2011 Feb 12.

Balkundi S, Nowacek AS, Roy U, **Martinez-Skinner A**, McMillan J, Gendelman HE. Methods development for blood borne macrophage carriage of nanoformulated antiretroviral drugs. *J Vis Exp*. 2010 Dec 9;(46).

Kosloski LM, Ha DM, **Hutter JA**, Stone DK, Pichler MR, **Reynolds AD**, Gendelman HE, Mosley RL. Adaptive immune regulation of glial homeostasis as an immunization strategy for neurodegenerative diseases.

J Neurochem. 2010 Sep 1;114(5):1261-76.

Mollema N, Haider NB. Focus on molecules: nuclear hormone receptor Nr2e3: impact on retinal development and disease. *Exp Eye Res.* 2010 Aug;91(2):116-7.

Tian C, Shao CH, **Fenster DS**, Mixan M, Romberger DJ, Toews ML, Bidasee KR. Chloroform extract of hog barn dust modulates skeletal muscle ryanodine receptor calcium-release channel (RyR1). *J Appl Physiol.* 2010 Sep;109(3):830-9.

Yan Y, Cao PT, Greer PM, Nagengast ES, **Kolb RH**, Mumby MC, Cowan KH. Protein phosphatase 2A has an essential role in the activation of gamma-irradiation-induced G2/M checkpoint response. *Oncogene.* 2010 Jul 29;29(30):4317-29.

Huseby MJ, Kruse AC, Digre J, Kohler PL, Vocke JA, **Mann EE**, Bayles KW, Bohach GA, Schlievert PM, Ohlendorf DH, Earhart CA. Beta toxin catalyzes formation of nucleoprotein matrix in staphylococcal biofilms. *Proc Natl Acad Sci U S A.* 2010 Aug 10;107(32):14407-12.

Behrens ME, Grandgenett PM, **Bailey JM**, Singh PK, Yi CH, Yu F, Hollingsworth MA. The reactive tumor microenvironment: MUC1 signaling directly reprograms transcription of CTGF. *Oncogene.* 2010 Oct 21;29(42):5667-77.

2011

Nowacek AS, Balkundi S, McMillan J, Roy U, **Martinez-Skinner A**, Mosley RL, Kanmogne G, Kabanov AV, Bronich T, Gendelman HE. Analyses of nanoformulated antiretroviral drug charge, size, shape and content for uptake, drug release and antiviral activities in human monocyte-derived macrophages. *J Control Release.* 2011 Mar 10;150(2):204-11.

Shao CH, **Capek HL**, Patel KP, Wang M, Tang K, Desouza C, Nagai R, Mayhan W, Periasamy M, Bidasee KR. Carbonylation Contributes to SERCA2a Activity Loss and Diastolic Dysfunction in a Rat Model of Type 1 Diabetes. *Diabetes*. 2011 Mar;60(3):947-59.

Mercer AJ, Rabl K, Riccardi GE, Brecha NC, Stella SL Jr, Thoreson WB. Location of release sites and calcium-activated chloride channels relative to calcium channels at the photoreceptor ribbon synapse. *J Neurophysiol*. 2011 Jan;105(1):321-35.

Krizaj D, **Mercer AJ**, Thoreson WB, Barabas P. Intracellular pH modulates inner segment calcium homeostasis in vertebrate photoreceptors. *Am J Physiol Cell Physiol*. 2011 Jan;300(1):C187-97

Abdul Muneer, PM, Alikunju, S, Szlachetka AM, Mercer AJ, and Haorah, J. Ethanol impairs glucose uptake by human astrocytes and neurons: protective effects of acetyl-L-carnitine. *Int. J. Physiol. Pathophysiol. Pharmacol*. 2001, 3: 48-56.

Clayton SC, Haack KK, Zucker IH. Renal denervation modulates angiotensin receptor expression in the renal cortex of rabbits with chronic heart failure. *Am J Physiol Renal Physiol*. 2011 Jan;300(1):F31-9.

Gong N, Liu J, **Reynolds AD**, Gorantla S, Mosley RL, Gendelman HE. Brain ingress of regulatory T cells in a murine model of HIV-1 encephalitis. *J Neuroimmunol*. 2011 Jan;230(1-2):33-41.

Cordes CM, Bennett RG, Siford GL, Hamel FG. Redox regulation of insulin degradation by insulin-degrading enzyme. *PLoS One*. 2011 Mar 23;6(3):e18138.

Holtzclaw JD, **Grimm PR**, Sansom SC. Role of BK channels in hypertension and potassium secretion. *Curr Opin Nephrol Hypertens*. 2011 Sep;20(5):512-7.

Mercer AJ, Thoreson WB. The dynamic architecture of photoreceptor ribbon synapses: Cytoskeletal, extracellular matrix, and intramembrane proteins. *Vis Neurosci*. 2011 Nov;28(6):453-71.

Bartoletti TM, Jackman SL, Babai N, **Mercer AJ**, Kramer RH, Thoreson WB. Release from the cone ribbon synapse under bright light conditions can be

- controlled by the opening of only a few Ca(2+) channels. *J Neurophysiol.* 2011 Dec;106(6):2922-35. Epub 2011 Aug 31.
- Mercer AJ**, Chen M, Thoreson WB. Lateral mobility of presynaptic L-type calcium channels at photoreceptor ribbon synapses. *J Neurosci.* 2011 Mar 23;31(12):4397-406.
- Kreiling JL, **Brader K**, Kolar C, Borgstahl GE. A real-time and hands-on research course in protein purification and characterization: Purification and crystal growth of human inosine triphosphate pyrophosphatase. *Biochem Mol Biol Educ.* 2011 Jan-Feb;39(1):28-37.
- Suzuki Y, **Gilmore JL**, Yoshimura SH, Henderson RM, Lyubchenko YL, Takeyasu K. Visual Analysis of Concerted Cleavage by Type IIF Restriction Enzyme SfiI in Subsecond Time Region. *Biophys J.* 2011 Dec 21;101(12):2992-8.
- Jun G, Nicolaou M, Morrison MA, Buros J, Morgan DJ, Radeke MJ, Yonekawa Y, Tsironi EE, Kotoula MG, Zacharaki F, **Mollema N**, Yuan Y, Miller JW, Haider NB, Hageman GS, Kim IK, Schaumberg DA, Farrer LA, DeAngelis MM. Influence of ROBO1 and RORA on risk of age-related macular degeneration reveals genetically distinct phenotypes in disease pathophysiology. *PLoS One.* 2011;6(10):e25775. Epub 2011 Oct 6.
- Mollema NJ**, Yuan Y, **Jelcick AS**, Sachs AJ, von Alpen D, Schorderet D, Escher P, Haider NB. Nuclear receptor Rev-erb alpha (Nr1d1) functions in concert with Nr2e3 to regulate transcriptional networks in the retina. *PLoS One.* 2011 Mar 8;6(3):e17494.
- Miller JD, **Clabaugh SE**, Smith DR, Stevens RB, Wrenshall LE. Interleukin -2 is present in human blood vessels and released in biologically active form by heparanase. *Immunol Cell Biol.* 2011 May 24. [Epub ahead of print]
- Constantino AA**, Huang Y, Zhang H, Wood C, Zheng JC. HIV-1 clade B and C isolates exhibit differential replication: relevance to macrophage-mediated neurotoxicity. *Neurotox Res.* 2011 Oct;20(3):277-88.
- Remmers N, **Bailey JM**, Mohr AM, Hollingsworth MA. Molecular pathology of early pancreatic cancer. *Cancer Biomark.* 2011;9(1-6):421-40.
- Tian C, Shao CH, **Moore CJ**, Kutty S, Walseth T, DeSouza C, Bidasee KR. Gain of function of cardiac ryanodine receptor in a rat model of type 1 diabetes. *Cardiovasc Res.* 2011 Jul 15;91(2):300-9. Epub 2011 Mar 18.
- Jelcick AS**, Yuan Y, Leehy BD, Cox LC, Silveira AC, Qiu F, Schenk S, Sachs AJ, Morrison MA, Nystuen AM, DeAngelis MM, Haider NB. Genetic

- variations strongly influence phenotypic outcome in the mouse retina. *PLoS One*. 2011;6(7):e21858.
- Kollessery G, **Nordgren TM**, Mittal AK, Joshi SS, Sanderson SD. Tumor-specific peptide-based vaccines containing the conformationally biased, response-selective C5a agonists EP54 and EP67 protect against aggressive large B cell lymphoma in a syngeneic murine model. *Vaccine*. 2011 Aug 11;29(35):5904-10.
- Truong-Bolduc QC, Dunman PM, **Eidem T**, Hooper DC. Transcriptional profiling analysis of the global regulator NorG, a GntR-like protein of *Staphylococcus aureus*. *J Bacteriol*. 2011 Nov;193(22):6207-14.
- Hutter-Saunders JA**, Mosley RL, Gendelman HE. Pathways towards an effective immunotherapy for Parkinson's disease. *Expert Rev Neurother*. 2011 Dec;11(12):1703-15.
- Hutter-Saunders JA**, Gendelman HE, Mosley RL. Murine Motor and Behavior Functional Evaluations for Acute 1-Methyl-4-Phenyl-1,2,3,6-Tetrahydropyridine (MPTP) Intoxication. *J Neuroimmune Pharmacol*. 2011 Mar 24
- Hutter-Saunders JA**, **Kosloski LM**, McMillan JM, Yotam N, Rinat T, Mosley RL, Gendelman HE. Neuroscience. BL-1023 improves behavior and neuronal survival in 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-intoxicated mice. 2011 Apr 28;180:293-304.
- Balkundi S, Nowacek AS, Veerubhotla RS, Chen H, **Martinez-Skinner A**, Roy U, Mosley RL, Kanmogne G, Liu X, Kabanov AV, Bronich T, McMillan J, Gendelman HE. Comparative manufacture and cell-based delivery of antiretroviral nanoformulations. *Int J Nanomedicine*. 2011;6:3393-404. Epub 2011 Dec 20.
- Lee HT, Carr C, **Siebler H**, Waters L, Khutsishvili I, Iseka F, Domack B, Olsen CM, Marky LA. A thermodynamic approach for the targeting of nucleic acid structures using their complementary single strands. *Methods Enzymol*. 2011;492:1-26.
- Haridas D, Chakraborty S, Ponnusamy MP, Lakshmanan I, Rachagani S, **Cruz E**, Kumar S, Das S, Lele SM, Anderson JM, Wittel UA, Hollingsworth MA, Batra SK. Pathobiological implications of MUC16 expression in pancreatic cancer. *PLoS One*. 2011;6(10):e26839. Epub 2011 Oct 31.
- Pang X, Moussa SH, Targy NM, Bose JL, George NM, **Gries C**, Lopez H, Zhang L, Bayles KW, Young R, Luo X. Active Bax and Bak are functional holins. *Genes Dev*. 2011 Nov 1;25(21):2278-90. doi: 10.1101/gad.171645.111.

Epub 2011 Oct 17.

Peters, H. L., A. Tuli, M. Sharma, N. Naslavsky, S. Caplan, R. G. MacDonald, and J. C. Solheim. Regulation of major histocompatibility complex class I molecule expression on cancer cells by amyloid precursor-like protein 2. *Immunologic Research* 51:39-44, 2011.