

2014 Student Publications-Rutgers SGS-Newark

Alagappan D, **Ziegler AN**, Chidambaram S, Min J, Wood TL, Levison SW. Insulin-Like Growth Factor Receptor Signaling is Necessary for Epidermal Growth Factor Mediated Proliferation of SVZ Neural Precursors in vitro Following Neonatal Hypoxia-Ischemia. *Front Neurol.* 2014 May 26;5:79. [PubMed](#)

Aleynik A, Gernavage KM, Mourad YSh, **Sherman LS**, Liu K, Gubenko YA, Rameshwar P. Stem cell delivery of therapies for brain disorders. *Clin Transl Med.* 2014 Jul 19;3:24. [PubMed](#)

Alvarez TL, **Jaswal** R, Gohel S, Biswal BB. Functional activity within the frontal eye fields, posterior parietal cortex, and cerebellar vermis significantly correlates to symmetrical vergence peak velocity: an ROI-based, fMRI study of vergence training. *Front Integr Neurosci.* 2014 Jun 17;8:50. [PubMed](#)

Androwis GJ, Michael PA, Strongwater A, Foulds RA. Estimation of intrinsic joint impedance using quasi-static passive and dynamic methods in individuals with and without Cerebral Palsy. *Conf Proc IEEE Eng Med Biol Soc.* 2014;2014:4403-6. [PubMed](#)

Avcu P, Jiao X, Myers CE, Beck KD, Pang KC, Servatius RJ. Avoidance as expectancy in rats: sex and strain differences in acquisition. *Front Behav Neurosci.* 2014 Oct 6;8:334. [PubMed](#)

Bajaj D, **Geissler JR**, Allen MR, Burr DB, Fritton JC. The resistance of cortical bone tissue to failure under cyclic loading is reduced with alendronate. *Bone.* 2014 Jul;64:57-64. [PubMed](#)

Bhattacharyya M, Nandanoor A, Osman M, Kasinathan C, Frederikse P. NMDA glutamate receptor NR1, NR2A and NR2B expression and NR2B Tyr-1472 phosphorylation in the lens. *Neurochem Res.* 2014 Sep;39(9):1825-32. [PubMed](#)

Castellano P, Eugenin EA. Regulation of gap junction channels by infectious agents and inflammation in the CNS. *Front Cell Neurosci.* 2014 May 9;8:122. [PubMed](#)

Catuzzi JE, Beck KD. Anxiety vulnerability in women: a two-hit hypothesis. *Exp Neurol.* 2014 Sep;259:75-80. [PubMed](#)

Chen L, **Chavda** KD, Findlay J, Peirano G, Hopkins K, Pitout JD, Bonomo RA, Woodford N, DeLeo FR, Kreiswirth BN. Multiplex PCR for identification of two capsular types in epidemic KPC-producing *Klebsiella pneumoniae* sequence type 258 strains. *Antimicrob Agents Chemother.* 2014 Jul;58(7):4196-9. [PubMed](#)

Chen L, **Chavda** KD, Melano RG, Hong T, Rojtman AD, Jacobs MR, Bonomo RA, Kreiswirth BN. Molecular survey of the dissemination of two blaKPC-harboring IncFIA plasmids in New Jersey and New York hospitals. *Antimicrob Agents Chemother.* 2014;58(4):2289-94. [PubMed](#)

Chen L, **Chavda** KD, Melano RG, Jacobs MR, Koll B, Hong T, Rojtman AD, Levi MH, Bonomo RA, Kreiswirth BN. Comparative genomic analysis of KPC-encoding pKpQIL-

like plasmids and their distribution in New Jersey and New York Hospitals. *Antimicrob Agents Chemother*. 2014 May;58(5):2871-7. [PubMed](#)

Chen L, Hu H, **Chavda** KD, Zhao S, Liu R, Liang H, Zhang W, Wang X, Jacobs MR, Bonomo RA, Kreiswirth BN. Complete sequence of a KPC-producing IncN multidrug-resistant plasmid from an epidemic Escherichia coli sequence type 131 strain in China. *Antimicrob Agents Chemother*. 2014;58(4):2422-5. [PubMed](#)

Chen L, Mathema B, **Chavda** KD, DeLeo FR, Bonomo RA, Kreiswirth BN. Carbapenemase-producing Klebsiella pneumoniae: molecular and genetic decoding. *Trends Microbiol*. 2014 Dec;22(12):686-96. [PubMed](#)

Chen P, Goedert KM, **Shah** P, Foundas AL, Barrett AM. Integrity of medial temporal structures may predict better improvement of spatial neglect with prism adaptation treatment. *Brain Imaging Behav*. 2014 Sep;8(3):346-58. [PubMed](#)

Christakos S, Seth T, **Wei** R, **Veldurthy** V, Sun C, Kim KI, Kim KY, Tariq U, Dhawan P. Vitamin D and health: beyond bone. *MD Advis*. 2014 Summer;7(3):28-32. Review. No abstract available. [PubMed](#)

Cominski TP, Jiao X, **Catuzzi** JE, Stewart AL, Pang KC. The role of the hippocampus in avoidance learning and anxiety vulnerability. *Front Behav Neurosci*. 2014 Aug 8;8:273. [PubMed](#)

Cornett AL, Lutz CS. Regulation of COX-2 expression by miR-146a in lung cancer cells. *RNA*. 2014 Sep;20(9):1419-30. [PubMed](#)

Cornett AL, Lutz CS. RHAPA: a new method to quantify alternative polyadenylation. *Methods Mol Biol*. 2014;1125:157-67. [PubMed](#)

David BT, Sampath S, Dong W, Heiman A, **Rella** CE, Elkabes S, Heary RF. A toll-like receptor 9 antagonist improves bladder function and white matter sparing in spinal cord injury. *J Neurotrauma*. 2014 Nov 1;31(21):1800-6. [PubMed](#)

De S, Barnes BJ. B cell transcription factors: Potential new therapeutic targets for SLE. *Clin Immunol*. 2014 May-Jun;152(1-2):140-51. [PubMed](#)

Deleo FR, Chen L, Porcella SF, Martens CA, Kobayashi SD, Porter AR, **Chavda** KD, Jacobs MR, Mathema B, Olsen RJ, Bonomo RA, Musser JM, Kreiswirth BN. Molecular dissection of the evolution of carbapenem-resistant multilocus sequence type 258 Klebsiella pneumoniae. *Proc Natl Acad Sci U S A*. 2014 Apr 1;111(13):4988-93. [PubMed](#)

Douard V, **Patel** C, **Lee** J, Tharabenjasin P, **Williams** E, Fritton JC, Sabbagh Y, Ferraris RP. Chronic high fructose intake reduces serum 1,25(OH)2D3 levels in calcium-sufficient rodents. *PLoS One*. 2014 Apr 9;9(4):e93611. [PubMed](#)

Drlica K, Mustaev A, Towle TR, **Luan** G, Kerns RJ, Berger JM. Bypassing fluoroquinolone resistance with quinazolinediones: studies of drug-gyrase-DNA complexes having implications for drug design. *ACS Chem Biol*. 2014 Dec 19;9(12):2895-904. [PubMed](#)

Ersen A, **Abdo** A, Sahin M. Temperature elevation profile inside the rat brain induced by a laser beam. *J Biomed Opt.* 2014 Jan;19(1):15009. [PubMed](#)

Espinosa V, Jhingran A, **Dutta** O, Kasahara S, Donnelly R, Du P, Rosenfeld J, Leiner I, Chen CC, Ron Y, Hohl TM, Rivera A. Inflammatory monocytes orchestrate innate antifungal immunity in the lung. *PLoS Pathog.* 2014 Feb 20;10(2):e1003940. [PubMed](#)

Fitzpatrick ER, Hu T, **Ciccarelli** BT, Whitehead IP. Regulation of vesicle transport and cell motility by Golgi-localized Dbs. *Small GTPases.* 2014;5(4):1-12. [PubMed](#)

Flowers S, Patel PJ, Gleicher S, Amer K, **Himelman** E, Goel S, Moran E. p107-Dependent recruitment of SWI/SNF to the alkaline phosphatase promoter during osteoblast differentiation. *Bone.* 2014 Dec;69:47-54. [PubMed](#)

Fluet GG, Merians AS, **Qiu** Q, Davidow A, Adamovich SV. Comparing integrated training of the hand and arm with isolated training of the same effectors in persons with stroke using haptically rendered virtual environments, a randomized clinical trial. *J Neuroeng Rehabil.* 2014 Aug 23;11:126. [PubMed](#)

Fluet GG, Merians AS, **Qiu** Q, **Saleh** S, Ruano V, Delmonico AR, Adamovich SV. Robotic/virtual reality intervention program individualized to meet the specific sensorimotor impairments of an individual patient: a case study. *Int J Disabil Hum Dev.* 2014 Sep;13(3):401-407. [PubMed](#)

Fotinos A, **Nagarajan** N, Martins AS, Fritz DT, Garsetti D, Lee AT, Hong CC, Rogers MB. Bone morphogenetic protein-focused strategies to induce cytotoxicity in lung cancer cells. *Anticancer Res.* 2014 May;34(5):2095-104. [PubMed](#)

Guito J, Gavina A, Palmeri D, Lukac DM. The cellular peptidyl-prolyl cis/trans isomerase Pin1 regulates reactivation of Kaposi's sarcoma-associated herpesvirus from latency. *J Virol.* 2014 Jan;88(1):547-58. [PubMed](#)

Guo Y, Foulds RA, Adamovich SV, Sahin M. Encoding of forelimb forces by corticospinal tract activity in the rat. *Front Neurosci.* 2014 May 1;8:62. [PubMed](#)

Heiman A, **Pallottie** A, Heary RF, Elkabes S. Toll-like receptors in central nervous system injury and disease: a focus on the spinal cord. *Brain Behav Immun.* 2014 Nov;42:232-45. [PubMed](#)

Holloway JL, Allen MT, Myers CE, Servatus RJ. Behaviorally inhibited individuals demonstrate significantly enhanced conditioned response acquisition under non-optimal learning conditions. *Behav Brain Res.* 2014 Mar 15;261:49-55. [PubMed](#)

Jaswal R, Gohel S, Biswal BB, Alvarez TL. Task-modulated coactivation of vergence neural substrates. *Brain Connect.* 2014 Oct;4(8):595-607. [PubMed](#)

Karunakaran K, **Abbruzzese** K, Xu H, **Ehrenberg** N, Foulds R. Haptic proprioception in a virtual locomotor task. *Conf Proc IEEE Eng Med Biol Soc.* 2014;2014:3594-7. [PubMed](#)

Kimani SG, **Geng K**, **Kasikara C**, **Kumar S**, **Sriram G**, Wu Y, Birge RB. Contribution of Defective PS Recognition and Efferocytosis to Chronic Inflammation and Autoimmunity. *Front Immunol.* 2014 Nov 10;5:566. [PubMed](#)

Kasar S, Underbayev C, Yuan Y, Hanlon M, Aly S, Khan H, Chang V, Batish M, Gavrilova T, Badiane F, Degheidy H, Marti G, Raveche E. Therapeutic implications of activation of the host gene (Dleu2) promoter for miR-15a/16-1 in chronic lymphocytic leukemia. *Oncogene*. 2014 Jun 19;33(25):3307-15. [PubMed](#)

Kumar S, Fajardo JE, Birge RB, **Sriram G**. Crk at the quarter century mark: perspectives in signaling and cancer. *J Cell Biochem*. 2014 May;115(5):819-25. [PubMed](#)

Lea MA, **Pourat J**, **Patel R**, desBordes C. Growth inhibition of colon cancer cells by compounds affecting AMPK activity. *World J Gastrointest Oncol*. 2014 Jul 15;6(7):244-52. [PubMed](#)

Li L, Hong Y, **Luan G**, **Mosel M**, Malik M, Drlica K, Zhao X. Ribosomal elongation factor 4 promotes cell death associated with lethal stress. *MBio*. 2014 Dec 9;5(6):e01708. [PubMed](#)

Lin HN, O'Connor JP. Immunohistochemical localization of key arachidonic acid metabolism enzymes during fracture healing in mice. *PLoS One*. 2014 Feb 7;9(2):e88423. [PubMed](#)

Lutz BM, Bekker A, Tao YX. Noncoding RNAs: new players in chronic pain. *Anesthesiology*. 2014 Aug;121(2):409-17. [PubMed](#)

Markey FB, Ruezinsky W, Tyagi S, Batish M. Fusion FISH imaging: single-molecule detection of gene fusion transcripts in situ. *PLoS One*. 2014 Mar 27;9(3):e93488. [PubMed](#)

Mavrianos J, Desai C, Chauhan N. Two-component histidine phosphotransfer protein Ypd1 is not essential for viability in *Candida albicans*. *Eukaryot Cell*. 2014 Apr;13(4):452-60. [PubMed](#)

Munoz JL, Rodriguez-Cruz V, Greco SJ, Ramkissoon SH, Ligon KL, Rameshwar P. Temozolomide resistance in glioblastoma cells occurs partly through epidermal growth factor receptor-mediated induction of connexin 43. *Cell Death Dis*. 2014 Mar 27;5:e1145. [PubMed](#)

Mustaev A, Malik M, Zhao X, Kurepina N, **Luan G**, Oppegard LM, Hiasa H, Marks KR, Kerns RJ, Berger JM, Drlica K. Fluoroquinolone-gyrase-DNA complexes: two modes of drug binding. *J Biol Chem*. 2014 May 2;289(18):12300-12. [PubMed](#)

Neuberger EJ, **Wahab RA**, Jayakumar A, Pfister BJ, Santhakumar V. Distinct effect of impact rise times on immediate and early neuropathology after brain injury in juvenile rats. *J Neurosci Res*. 2014 Oct;92(10):1350-1361. [PubMed](#)

Nguyen KQ, Tsou WI, Calarese DA, Kimani SG, **Singh S**, Hsieh S, Liu Y, Lu B, Wu Y, Garforth SJ, Almo SC, Kotenko SV, Birge RB. Overexpression of MERTK receptor

tyrosine kinase in epithelial cancer cells drives efferocytosis in a gain-of-function capacity. *J Biol Chem.* 2014 Sep 12;289(37):25737-49. [PubMed](#)

O'Connor JP, Manigrasso MB, Kim BD, **Subramanian S.** Fracture healing and lipid mediators. *Bonekey Rep.* 2014 Apr 2;3:517. [PubMed](#)

Ordek G, Proddutur A, Santhakumar V, Pfister BJ, Sahin M. Electrophysiological monitoring of injury progression in the rat cerebellar cortex. *Front Syst Neurosci.* 2014 Oct 9;8:197. [PubMed](#)

Ordek G, Sahin M. Spatial patterns of high-frequency oscillations in the rat cerebellar cortex. *Conf Proc IEEE Eng Med Biol Soc.* 2014;2014:4107-10. [PubMed](#)

Paglia DN, Wey A, Hreha J, Park AG, Cunningham C, Uko L, Benevenia J, O'Connor JP, Lin SS. Local vanadium release from a calcium sulfate carrier accelerates fracture healing. *J Orthop Res.* 2014 May;32(5):727-34. [PubMed](#)

Pasternack JB, Domogauer JD, Khullar A, Akudugu JM, Howell RW. The advantage of antibody cocktails for targeted alpha therapy depends on specific activity. *J Nucl Med.* 2014 Dec;55(12):2012-9. [PubMed](#)

Patel V, Oh A, Voit A, Sultatos LG, Babu GJ, Wilson BA, Ho M, McArdle JJ. Altered active zones, vesicle pools, nerve terminal conductivity, and morphology during experimental MuSK myasthenia gravis. *PLoS One.* 2014 Dec 1;9(12):e110571. [PubMed](#)

Patil V, Zhao Y, **Shah S, Fox BA, Rommereim LM, Bzik DJ, Yap GS.** Co-existence of classical and alternative activation programs in macrophages responding to *Toxoplasma gondii*. *Int J Parasitol.* 2014 Feb;44(2):161-4. [PubMed](#)

Perez F, Hujer AM, Marshall SH, Ray AJ, Rather PN, Suwantarat N, Dumford D 3rd, O'Shea P, Domitrovic TN, Salata RA, **Chavda KD, Chen L, Kreiswirth BN, Vila AJ, Haussler S, Jacobs MR, Bonomo RA.** Extensively drug-resistant *pseudomonas aeruginosa* isolates containing blaVIM-2 and elements of *Salmonella* genomic island 2: a new genetic resistance determinant in Northeast Ohio. *Antimicrob Agents Chemother.* 2014 Oct;58(10):5929-35. [PubMed](#)

Pilkar R, **Yarossi M, Nolan KJ.** EMG of the tibialis anterior demonstrates a training effect after utilization of a foot drop stimulator. *NeuroRehabilitation.* 2014 Jan 1;35(2):299-305. [PubMed](#)

Rella CE, Ruel N, Eugenin EA. Development of imaging techniques to study the pathogenesis of biosafety level 2/3 infectious agents. *Pathog Dis.* 2014 Dec;72(3):167-73. [PubMed](#)

Rohafza M, Fluet GG, Qiu Q, Adamovich S. Correlation of reaching and grasping kinematics and clinical measures of upper extremity function in persons with stroke related hemiplegia. *Conf Proc IEEE Eng Med Biol Soc.* 2014;2014:3610-3. [PubMed](#)

Routh VH, **Hao L, Santiago AM, Sheng Z, Zhou C.** Hypothalamic glucose sensing: making ends meet. *Front Syst Neurosci.* 2014 Dec 10;8:236. [PubMed](#)

Saleh S, Adamovich SV, Tunik E. Mirrored feedback in chronic stroke: recruitment and effective connectivity of ipsilesional sensorimotor networks. *Neurorehabil Neural Repair*. 2014 May;28(4):344-54. [PubMed](#)

Seth-Vollenweider T, Joshi S, Dhawan P, Sif S, Christakos S. Novel mechanism of negative regulation of 1,25-dihydroxyvitamin D₃-induced 25-hydroxyvitamin D₃ 24-hydroxylase (Cyp24a1) Transcription: epigenetic modification involving cross-talk between protein-arginine methyltransferase 5 and the SWI/SNF complex. *J Biol Chem*. 2014 Dec 5;289(49):33958-70. [PubMed](#)

Sheng Z, **Santiago** AM, Thomas MP, Routh VH. Metabolic regulation of lateral hypothalamic glucose-inhibited orexin neurons may influence midbrain reward neurocircuitry. *Mol Cell Neurosci*. 2014 Sep;62:30-41. [PubMed](#)

Sheynin J, Beck KD, Pang KC, Servatius RJ, Shikari S, Ostovich J, Myers CE. Behaviourally inhibited temperament and female sex, two vulnerability factors for anxiety disorders, facilitate conditioned avoidance (also) in humans. *Behav Processes*. 2014 Mar;103:228-35. [PubMed](#)

Sheynin J, Beck KD, Servatius RJ, Myers CE. Acquisition and extinction of human avoidance behavior: attenuating effect of safety signals and associations with anxiety vulnerabilities. *Front Behav Neurosci*. 2014 Sep 15;8:323. [PubMed](#)

Shin HJ, **DeCotiis** J, Giron M, Palmeri D, Lukac DM. Histone deacetylase classes I and II regulate Kaposi's sarcoma-associated herpesvirus reactivation. *J Virol*. 2014 Jan;88(2):1281-92. [PubMed](#)

Shrirao AB, **Kung** FH, **Yip** D, Cho CH, Townes-Anderson E. Vacuum-assisted fluid flow in microchannels to pattern substrates and cells. *Biofabrication*. 2014 Sep;6(3):035016. [PubMed](#)

Siriwardane ML, DeRosa K, Collins G, Pfister BJ. Controlled formation of cross-linked collagen fibers for neural tissue engineering applications. *Biofabrication*. 2014 Mar;6(1):015012. [PubMed](#)

Skop NB, Calderon F, Cho CH, Gandhi CD, Levison SW. Improvements in biomaterial matrices for neural precursor cell transplantation. *Mol Cell Ther*. 2014 Jul 1;2:19. [PubMed](#)

Stec J, Vilchez C, Lun S, Perryman AL, **Wang** X, Freundlich JS, Bishai W, Jacobs WR Jr, Kozikowski AP. Biological evaluation of potent triclosan-derived inhibitors of the enoyl-acyl carrier protein reductase InhA in drug-sensitive and drug-resistant strains of *Mycobacterium tuberculosis*. *ChemMedChem*. 2014 Nov;9(11):2528-37. [PubMed](#)

Tasker C, Ding J, Schmolke M, Rivera-Medina A, Garcia-Sastre A, Chang TL. 17 β -estradiol protects primary macrophages against HIV infection through induction of interferon-alpha. *Viral Immunol*. 2014 May;27(4):140-50. [PubMed](#)

Tharabenjasin P, Douard V, **Patel** C, Krishnamra N, Johnson RJ, Zuo J, Ferraris RP. Acute interactions between intestinal sugar and calcium transport in vitro. *Am J Physiol Gastrointest Liver Physiol*. 2014 Jan 1;306(1):G1-12. [PubMed](#)

Tsou WI, Nguyen KQ, Calarese DA, Garforth SJ, Antes AL, Smirnov SV, Almo SC, Birge RB, Kotenko SV. Receptor tyrosine kinases, TYRO3, AXL, and MER, demonstrate distinct patterns and complex regulation of ligand-induced activation. *J Biol Chem.* 2014 Sep 12;289(37):25750-63. [PubMed](#)

Vaziri B, Wu H, Dhawan AP, Du P, Howell RW; SNMMI MIRD Committee.. MIRD pamphlet No. 25: MIRDcell V2.0 software tool for dosimetric analysis of biologic response of multicellular populations. *J Nucl Med.* 2014 Sep;55(9):1557-64. [PubMed](#)

Velasquez S, Eugenin EA. Role of Pannexin-1 hemichannels and purinergic receptors in the pathogenesis of human diseases. *Front Physiol.* 2014 Mar 14;5:96. [PubMed](#)

Visalli MA, House BL, **Selariu A, Zhu H, Visalli RJ.** The varicella-zoster virus portal protein is essential for cleavage and packaging of viral DNA. *J Virol.* 2014 Jul;88(14):7973-86. [PubMed](#)

Wey A, Cunningham C, Hreha J, Breitbart E, **Cottrell J, Ippolito J, Clark D, Lin HN, Benevenia J, O'Connor JP, Lin SS, Paglia DN.** Local ZnCl₂ accelerates fracture healing. *J Orthop Res.* 2014 Jun;32(6):834-41. [PubMed](#)

Yarossi M, Adamovich S, Tunik E. Sensorimotor cortex reorganization in subacute and chronic stroke: A neuronavigated TMS study. *Conf Proc IEEE Eng Med Biol Soc.* 2014;2014:5788-91. [PubMed](#)

Yu S, Nie Y, Knowles B, Sakamori R, Stypulkowski E, **Patel C, Das S, Douard V, Ferraris RP, Bonder EM, Goldenring JR, Ip YT, Gao N.** TLR sorting by Rab11 endosomes maintains intestinal epithelial-microbial homeostasis. *EMBO J.* 2014 Sep 1;33(17):1882-95. [PubMed](#)

Ziegler AN, Chidambaram S, Forbes BE, Wood TL, Levison SW. Insulin-like growth factor-II (IGF-II) and IGF-II analogs with enhanced insulin receptor-a binding affinity promote neural stem cell expansion. *J Biol Chem.* 2014 Feb 21;289(8):4626-33. [PubMed](#)