

Summer 2020 UTHealth NRC Supplemental Material

Peer-Reviewed Publications

Ahn H, Galle K, Mathis K, Miao H, Montero-Hernandez S, Jackson N, Ju H, McCrackin H, Goodwin C, Hargraves A, Jain B, Dinh H, Abdul-Mooti S, Park L, Pollonini L (2020) Feasibility and efficacy of remotely supervised cranial electrical stimulation for pain in older adults with knee osteoarthritis: A randomized controlled pilot study. *J Clin Neurosci* 77:128-133.

Ahn H, La J, Chung J, Choi E, Fillingim R (2019) The Relationship between beta-endorphin and experimental pain sensitivity in older adults with knee osteoarthritis pain. *J Pain* 20:S37.

Ahn H, La JH, Chung JM, Maio H, Zhong C, Kim M, An K, Lyon D, Choi E, Fillingim R (2019) The relationship between β -endorphin and experimental pain sensitivity in older adults with knee osteoarthritis. *Biol Res Nurs* 21:400-406.

Ahn H, Sorkpor S, Miao H, Zhong C, Jorge R, Park L, Abdi S, Cho R (2019) Home-based self-administered transcranial direct current stimulation in older adults with knee osteoarthritis pain: An open-label study. *J Clin Neurosci* 66:61-65.

Ahn H, Zhong C, Miao H, Chaoul A, Park L, Yen IH, Vila MA, Sorkpor S, Abdi S (2019) Efficacy of combining home-based transcranial direct current stimulation with mindfulness-based meditation for pain in older adults with knee osteoarthritis: A randomized controlled pilot study. *J Clin Neurosci*. 2019;70:140-145.

Ahn H, Zhong C, Sorkpor S, Miao H (2019) Home-based transcranial direct current stimulation and experimental pain sensitivity. *Innov Aging* 3:S338.

Ahn SH, Savarraj JP, Parsha K, **Hergenroeder GW**, **Chang TR**, **Kim DH**, **Kitagawa R**, **Blackburn S**, **Choi HA** (2019) Inflammation in delayed ischemia and functional outcomes after subarachnoid Hemorrhage. *J Neuroinflammation* 16:213.

Ali FS, Arevalo O, Zorofchian S, Patrizz A, **Riascos R**, **Tandon N**, **Blanco A**, **Ballester LY**, **Esquenazi Y** (2019) Cerebral radiation necrosis: Incidence, pathogenesis, diagnostic challenges, and future opportunities. *Curr Oncol Rep* 21:66.

Andrei AR, Pojoga S, **Janz R**, **Dragoi V** (2019) Integration of cortical population signals for visual perception. *Nat Commun* 10:3832.

Arevalo OD, **Soto C**, Rabiei P, **Kamali A**, Ballester LY, **Esquenazi Y**, **Zhu JJ**, **Riascos RF** (2019) Assessment of glioblastoma response in the era of bevacizumab: Longstanding and emergent challenges in the imaging evaluation of pseudoresponse. *Front Neurol* 10:460.

Arnold DL, Banwell B, Bar-Or A, Ghezzi A, Greenberg BM, Waubant E, Giovannoni G, **Wolinsky JS**, Gärtner J, Rostásy K, Krupp L, Tardieu M, Brück W, Stites TE, Pearce GL, Häring DA, Merschhemke M, Chitnis T, for the PARADIGMS Study Investigators (2020) Effect of fingolimod on MRI outcomes in patients with paediatric-onset multiple sclerosis: Results from the phase 3 paradigms study. *J Neurol Neurosurg Psych* 91:483-492.

Ballester LY, Meis JM, Lazar AJ, Prabhu SS, Hoang KB, Leeds NE, Fuller GN (2020) Intracranial myxoid mesenchymal tumor with EWSR1-ATF1 fusion. *J Neuropathol Exp Neurol* 79:347-351.

Barkhof F, Kappos L, **Wolinsky JS**, Li DKB, Bar-Or A, Hartung H-P, Belachew S, Han J, Julian L, Sauter A, Napieralski J, Koendgen H, **Hauser SL** (2019) Onset of clinical and MRI efficacy of ocrelizumab in relapsing multiple sclerosis. *Neurology* 93:e1778-e1786.

Beard CL, **Schmitz JM**, Soder HE, **Suchting R**, **Yoon JH**, **Hasan KM**, Moeller FG, **Lane SD** (2019) Regional differences in white matter integrity in stimulant use disorders: A meta-analysis of diffusion tensor imaging studies. *Drug Alcohol Depend* 201:29-37.

Bello H, Graves J, Rohatgi S, Vakil M, **McCarty J**, Van Hemert R, Geppert S, Peterson R (2019) Skull base-related lesions at routine head CT from the emergency department: Pearls, pitfalls, and lessons learned. *RadioGraphics* 39:1161-1182.

Bonfante E, Calle S, Solomon N, **Jagolino A**, Cai C, Arevalo-Espejo O, **Riascos R**, **Sitton, C** (2019) Development of a Standardized Grading Scale for Atherosclerotic Disease of the Head and Neck. *J Comput Assist Tomogr* 43:533-538.

Bu F, Min JW, Munshi Y, Lai Y-J, Qi L, **Urayama A**, **McCullough LD**, Li J (2019) Activation of endothelial ras-related C3 botulinum toxin substrate 1 (Rac1) improves post-stroke recovery and angiogenesis via activating Pak1 in mice. *Exp Neurol* 322:113059.

Cabrera-Mendoza B, Fresno C, Monroy-Jaramillo N, **Fries GR**, **Walss-Bass C**, Glahn DC, Ostrosky-Wegman P, Genis-Mendoza AD, Martínez-Magaña JJ, Romero-Pimentel AL, Díaz-Otañez CE, García-Dolores F, González-Sáenz EE, Mendoza-Morales RC, Flores G, Vázquez-Roque R, Nicolini H (2020) Brain Gene Expression Profiling of Individuals With Dual Diagnosis Who Died by Suicide. *J Dual Diagn* 16:177-190.

Cabrera-Mendoza B, Fresno C, Monroy-Jaramillo N, **Fries GR**, **Walss-Bass C**, Glahn DC, Ostrosky-Wegman P, Mendoza-Morales RC, García-Dolores F, Díaz-Otañez CE, González-Sáenz EE, Genis-Mendoza AD, Martínez-Magaña JJ, Romero-Pimentel AL, Flores G, Vázquez-Roque RA, Nicolini H (2020) Sex differences in brain gene expression among suicide completers. *J Affect Disord* 267:67-77.

Cabrera-Mendoza B, Martínez-Magaña JJ, Genis-Mendoza AD, Monroy-Jaramillo N, **Walss-Bass C**, **Fries GR**, Garcia-Dolores G, Lopez-Armenta M, Flores G, Vazquez-Roque RA, Nicolini H (2020) Brain gene expression-DNA methylation correlation in suicide completers: Preliminary results. *Rev Invest Clin* 73: Online ahead of print.

Calle S, **Bonfante E**, Simmons G, Rogers J, **Sitton C**, Hughes K, Papanna RM, **Riascos R**, **Patel R** (2020) Postnatal Intracranial Findings Following Fetal Repair of Spinal Dysraphisms., *J Comput Assist Tomogr* 44:65-69.

Camkurt MA, Karababa İF, Erdal ME, Kandemir SB, **Fries GR**, Bayazit H, Ay ME, Kandemir H, Ay OI, Coşkun S, Çiçek E, **Selek S** (2020) MicroRNA dysregulation in manic and euthymic patients with bipolar disorder. *J Affect Disord* 261:84-90.

Cherian J, Srinivasan V, Froehler MT, Grossberg JA, Cawley CM, Hanel RA, Puri A, Dumont T, Ducruet AF, Albuquerque F, Arthur A, Cheema A Spiotta A Anadani M, Lopes D, Saled A, Kim L, Kelly CM, **Chen PR**, Mocco J, De Leacy R, Powers CJ, Grandhi R, Fargen Km, Chen SR, Johnson JN, Lam S, Kan P (2020) Flow Diversion for Treatment of Intracranial Aneurysms in Pediatric Patients: Multicenter Series. *Neurosurgery* 87:53-62.

Concha-Marambio L, Chacon MA, **Soto C** (2020) Preclinical detection of prions in blood of non-human primates peripherally infected with variant Creutzfeldt-Jakob disease prions. *Emerg Infect Dis* 26:34-43.

Cortese S, Asherson P, Sonuga-Barke E, Banaschewski T, Brandeis D, Buitelaar J, Coghill D, Daley D, Danckaerts M, Dittmann RW, Doepfner M, Ferrin M, Hollis C, Holtmann M, Konofal E, Lecendreux M, Santosh P, Rothenberger A, **Soutullo C**, Steinhausen HC, Stringaris A, Taylor E, Van der Oord S, Wong I, Zuddas A, Simonoff E (2020) Management approaches for ADHD during the COVID-19 virus pandemic: Guidance from the EUROPEAN ADHD Guidelines Group (EAGG). *Lancet Child Adolesc Health* 4:412-414.

Costa RM, **Baxter DA**, **Byrne JH** (2020) Computational model of the distributed representation of operant reward memory: Combinatoric engagement of intrinsic and synaptic plasticity mechanisms. *Learn Mem* 27:236-249

Cuevas-Diaz Duran R, Wang CY, Zheng H, Deneen B, **Wu JQ** (2019) Brain region-specific gene signatures revealed by distinct astrocyte subpopulations unveil links to glioma and neurodegenerative diseases. *eNeuro* 6:ENEURO.0288-18.

Cuevas-Diaz Duran R, Wei H, **Kim DH**, **Wu JQ** (2019) Long non-coding RNAs: Important regulators in the development, function, and disorders of the central nervous system. *Neuropath Appl Neuro* 45:538-556.

Davis K, Aghaeepour N, Ahn A, Angst M, Borsook D, Brenton A, Burczynski M, Crean C, Edwards R, Gaudilliere B, **Hergenroeder GW**, Iadarola M, Iyengar S, Jiang Y, Kong JT, Mackey S, Saab C, Sang C, Scholz J, Segerdahl M, Tracey I, Veasley C, Wang J, Wager T, Wasan A, and Pelleymounter M (2020) Discovery and validation of biomarkers to aid development of safe and effective pain therapeutics: challenges & opportunities. *Nat Rev Neurol* 16:381-400.

Dhande IS, Kneedler SC, Joshi SC, Zhu Y, Hicks MJ, Wenderfer SE, Braun MC, **Doris PA** (2019) Germ-line genetic variation in the immunoglobulin heavy chain creates stroke susceptibility in the spontaneously hypertensive rat. *Physiol Genomics* 51:578-585.

Dhande IS, Kneedler SC, Zhu Y, Joshi AS, Hicks MJ, Wenderfer SE, Braun MC, **Doris PA** (2020) Natural genetic variation in *Stim1* creates stroke in the spontaneously hypertensive rat. *Genes Immun* 21:182-192.

Dono A, Patrizz A, McCormack RM Putluri N, **Ganesh BP**, **Kaur B**, **McCullough LD**, **Ballester LY**, **Esquenazi Y** (2020) Glioma induced alterations in fecal short-chain fatty acids and neurotransmitters. *CNS Oncol* 9:CNS57.

Edwards G, **Zhao J**, **Dash PK**, **Soto C**, **Moreno-Gonzalez I** (2020) Traumatic brain injury induces tau aggregation and spreading. *J Neurotrauma* 37:80–92.

Elliott C, Belachew S, **Wolinsky JS**, **Hauser SL**, Kappos L, Barkhof F, Bernasconi C, Fecker J, Model F, Wei W, Arnold DL (2019) Chronic white matter lesion activity predicts clinical progression in primary progressive multiple sclerosis. *Brain* 142:2787-2799.

Elliott C, **Wolinsky JS**, **Hauser S**, Kappos L, Barkhof F, Bernasconi C, Wei W, Belachew S, Arnold D (2019) Slowly expanding/evolving lesions as a magnetic resonance imaging marker of chronic active multiple sclerosis lesions. *Mult Scler* 25:1915-1925.

Escobar LE, **Pritzkow S**, Winter SN, Gear DA, Kirchgessner MS, Dominguez-Villegas E, Machado G, Peterson AT, **Soto C** (2020) The ecology of chronic wasting disease in wildlife. *Biol Rev* 95:393-408.

Esquenazi Y, **Ballester LY** (2019) Telomerase reverse transcriptase alterations in human cancers: Diagnosis, prognosis, and therapeutic implications. *Cancer Cytopathol* 127:275-277.

Esquenazi Y, Moss N, Tabar V (2019) In reply: Thalamic glioblastoma: Clinical presentation, management strategies, and outcomes. *Neurosurg* 84:E289-E290.

Flaherty B, Jackson M, **Cox C**, Clark A, **Ewing-Cobbs L**, Holubkov R, Moore K, **Patel R**, Keenan H (2019) Ability of the PILOT score to predict 6-month functional outcome in pediatric patients with moderate–severe traumatic brain injury. *J Pediatr Surg* doi:10.1016/j.jpedsurg.2019.06.022.

Fowler MJ, Cotter JD, Knight BE, **Sevick-Muraca EM**, **Sandberg DI**, Sirianni RW (2020) Intrathecal drug delivery in the era of nanomedicine. *Adv Drug Deliv Rev* doi: 10.1016/j.addr.2020.02.006. Online ahead of print.

Fox EJ, Lublin FD, **Wolinsky JS, Cohen JA**, Williams IM, Meng X, Ziehn M, Kolodny S, Cree BAC (2019) Lymphocyte counts and infection rates: Long-term fingolimod treatment in primary progressive MS. *Neurol Neuroimmunol Neuroinflamm* 6:e614.

Fries GR (2020) Polygenic risk scores and their potential clinical use in psychiatry: Are we there yet? *Braz J Psychiatry* S1516-44462020005006207.

Fries GR, Bauer IE, **Scaini G**, Valvassori SS, **Walls-Bass C**, **Soares JC**, **Quevedo J** (2019) Accelerated hippocampal biological aging in bipolar disorder. *Bipolar Disord* 10.1111/bdi.12876.

Fries GR, Lima CNC, Valvassori SS, **Zunta-Soares G**, **Soares JC**, **Quevedo J** (2019) Preliminary investigation of peripheral extracellular vesicles' microRNAs in bipolar disorder. *J Affect Disord* 255:10-14.

Fries GR, **Walss-Bass C**, Bauer ME, **Teixeira AL** (2019) Revisiting inflammation in bipolar disorder. *Pharmacol Biochem Behav* 177:12-19.

Fries GR, Zamzow MJ, Andrews T, Pink O, Scaini G, **Quevedo J** (2020) Accelerated aging in bipolar disorder: A comprehensive review of molecular findings and their clinical implications. *Neurosci Biobehav Rev* 112:107-116.

Gabr RE, Coronado I, Robinson M, Sujit SJ, **Datta S**, Sun X, Allen WJ, Lublin FD, **Wolinsky JS, Narayana PA** (2019) Brain and lesion segmentation in multiple sclerosis using fully convolutional neural networks: A large-scale study. *Mult Scler* doi: 10.1177/1352458519856843. Online ahead of print.

Giridharan VV, Scaini G, Colpo GD, Doifode T, Pinjari OF, **Teixeira AL**, Petronilho F, Macêdo D, **Quevedo J, Barichello T** (2020) Clozapine prevents poly (I:C) induced inflammation by modulating NLRP3 pathway in microglial cells. *Cells* 9:577.

Gonzales NR, Reynolds AS (2020) Our patients are dying: Let's pay attention. *Neurology* 94:813-814.

Hauser S, Kappos L, Arnold DL, Bar-Or A, Brochet B, Naismith RT, Traboulsee AL, **Wolinsky JS**, Belachew S, Koendgen H, Levesque V, Manfrini M, Model F, Hubeaux S, Mehta L, Montalban X (2020) Five-years of ocrelizumab in relapsing multiple sclerosis: Opera studies open-label extension. *Neurology* (in press MS ID#: NEUROLOGY/2019/012393).

He L, Zhou J, Chen M, Lin CS, Kim SG, Zhou Y, Xiang L, Xie M, Bai H, Yao H, Shi C, Coelho PG, Bromage TG, Hu B, Tovar N, Witek L, **Wu J**, Chen K, Gu W, Zheng, J, Sheu T-J, Zhong J, Wen J, Niu Y, Cheng B, Gong Q, Owens DM, Stanislauskas M, Pei J, Chotkowski G, Wang S, Yang G, Zegarelli DJ, Shi X, Finkel M, Zhang W, Li J, Cheng J, Tarnow DP, Zhou X, Wang Z, Jiang X, Romanov A, Rowe DW, Wang S, Ye L, Ling J, Mao J (2019) Parenchymal and Stromal Tissue Regeneration of Tooth Organ by Pivotal Signals Reinstated in Decellularized Matrix. *Nature Materials* 18:627-637.

Honarpisheh P, Reynolds C, Blasco-Conesa MP, **Moruno-Manchon JF**, Putluri N, Bhattacharjee MB, **Urayama A, McCullough LD**, Priya Ganesh B (2020) Dysregulated gut homeostasis observed prior to the accumulation of the brain amyloid- β in Tg2576 mice. *Int J Mol Sci* 21:1711.

Iqbal F, Ballester LY, Akash N, **Sandberg DI**, Bhattacharjee MB (2020) 5 Year-Old with worsening seizure disorder. *Brain Pathol* 30:717-718.

Kamali A, Ghazi Sherbaf F, Rahmani F, Khayat-khoei M, Aein A, Gandhi A, Shah EG, H Sair HI, **Riascos RF, Yoshua E, Zhu J**, Keser Z, **Hasan KM** (2020) A direct visuomotor cortical connectivity of the human limbic system. Dissecting the trajectory of the parieto-occipito-hypothalamic tract in the human brain using diffusion weighted tractography. *Neurosci Lett* 728:134955.

Kamali A, Karbasian N, Ghazi Sherbaf F, Wilken LA, Aein A, Sair HI, Arevalo O, Rabiei P, **Choi SJ**, Mirbagheri S, **Riascos RF**, **Hasan KM** (2020) Uncovering the dorsal thalamo-hypothalamic tract of the human limbic system. *Neuroscience* 432:55-62.

Kappos L, **Wolinsky JS**, Giovannoni G, Arnold DL, Wang Q, Bernasconi C, Model F, Koendgen H, Manfrini M, Belachew S, **Hauser SL** (2020) Progression independent of relapse activity in patients with typical relapsing multiple sclerosis: Pooled analysis of 2 randomized clinical trials. *JAMA Neurology* 2020:e201568.

Khanpara S, Ruiz-Pardo D, Spence SC, West OC, **Riascos R** (2020) Incidence of cervical spine fractures on CT: A study in a large level I trauma center. *Emerg Radiol* 27:1-8.

Khatua S, Cooper LJJ, **Sandberg DI**, Ketonen L, Johnson JM, Rytting ME, Liu DD, Meador H, Trikha P, Nakkula RJ, Behbehani GK, Ragoonanan D, Gupta S, Kotrotsou A, Idris T, Shpall EJ, Rezvani K, Colen R, Zaky W, **Lee DA**, Gopalakrishnan V (2020) Phase I study of intraventricular infusions of autologous ex-vivo expanded NK cells in children with recurrent medulloblastoma and ependymoma. *Neuro Oncol* doi: 10.1093/neuonc/noaa047. Online ahead of print.

Kobayashi M, Tarnawsky SP, Wei H, Mishra A, Azevedo Portilho N, Wenzel P, **Davis B**, **Wu J**, Hadland B, Yoshimoto M (2019) Hemogenic endothelial cells can transition to hematopoietic stem cells through a B-1 lymphocyte-biased state during maturation in the mouse embryo. *Stem Cell Rep* 13:21-30.

Koren V, Andrei AR, Hu M, **Dragoi V**, Obermayer K (2019) Reading-out task variables as a low-dimensional reconstruction of neural spike trains in single trials. *PLoS One* 14:e0222649.

Kramer LA, **Hasan KM**, Stenger MB, Sargsyan A, Laurie SS, Otto C, Ploutz-Snyder RJ, Marshall-Goebel K, **Riascos RF**, Macias BR (2020) Intracranial effects of microgravity: A prospective longitudinal MRI study. *Radiology* 295:640-648.

Lee J, d'Aigle J, Atadja L, Quaicoe V, Honarpisheh P, Ganesh BP, Hassan A, Graf J, Petrosino JF, Putluri N, Zhu L, Durgan DJ, Bryan Jr RM, **McCullough LD**, **Venna VR** (2020) Gut microbiota-derived short-chain fatty acids promote post-stroke recovery in aged mice. *Circ Res* 10.1161/CIRCRESAHA.119.316448.

Lee AG, Mader TH, Gibson CR, Tarver W, Rabiei P, **Riascos RF**, Galdamez LA, Brunstetter T (2020) Spaceflight associated neuro-ocular syndrome (SANS) and the neuro-ophthalmologic effects of microgravity: A review and an update. *NPJ Microgravity* 6:7.

Leira EC, Russman AN, Biller J, Brown DL, Bushnell CD, Caso V, Chamorro A, Creutzfeldt CJ, Cruz-Flores S, Elkind MSV, Fayad P, Froehler MT, Goldstein LB, **Gonzales NR**, Kaskie B, Khatri P, Livesay S, Liebeskind DS, Majersik JJ, Moheet A, Romano JG, Sanossian N, Sansing LH, Silver B, Simpkins AN, Smith W, Tirschwell DL, Wang DZ, Yavagal DR, Worrall BB: Preserving stroke care during the COVID-19 pandemic: Potential issues and solutions. *Neurology* doi: 10.1212/WNL.0000000000009713. Online ahead of print.

Lejault P, **Moruno-Manchon JF**, Vemu SM, Honarpisheh P, Zhu L, Kim N, **Urayama A**, Monchaud D, **McCullough LD**, **Tsvetkov AS** (2020) Regulation of autophagy by DNA G-quadruplexes. *Autophagy* doi: 10.1080/15548627.2020.1769991.

Levental KR, Malmberg E, Symons JL, Fan Y-Y, Chapkin RS, Ernst R, **Levental I** (2020) Lipidomic and biophysical homeostasis of mammalian membranes counteracts dietary lipid perturbations to maintain cellular fitness. *Nat Commun* 11:1339.

Lewis CT, Savarraj JPJ, McGuire MF, **Hergenroeder GW**, **Alex Choi H**, **Kitagawa RS** (2019) Elevated inflammation and decreased platelet activity is associated with poor outcomes after traumatic brain injury. *J Clin Neurosci* 70:37-41.

Lewis CT, Zeineddine HA, **Esquenazi Y** (2020) Challenges of neurosurgery education during the coronavirus disease 2019 (COVID-19) pandemic: A U.S. perspective. *World Neurosurg* 138:545-547.

Li D, Zhang Y, Zhang Y, Wang Q, Miao Q, Xu Y, **Soares JC**, Zhang X, Zhang R (2019) Correlation between the epigenetic modification of histone H3K9 acetylation of NR2B gene promoter in rat hippocampus and ethanol withdrawal syndrome. *Mol Biol Rep* 46:2867-2875.

Lima CNC, da Silva FER, Chaves Filho AJM, Queiroz AIG, Okamura A, **Fries GR, Quevedo J**, Sousa FC, Vasconcelos S, Lucena DF, Fonteles M, Macedo DS (2019) Environmental stressors present memory deficits accompanied by immune-inflammatory/oxidative alterations: Relevance to the relationship between temperament and mood disorders. *Front Psychiatry* 10:547.

Liu RY, Zhang Y, Smolen P, Cleary LJ, Byrne JH (2020) Role of p90 ribosomal S6 kinase in long-term synaptic facilitation and enhanced neuronal excitability. *Sci Rep* 10:608.

Lopez-Rivera V, Sheriff FG, **Sandberg DI, Blackburn S, Dannenbaum M**, Sheth SA, Day AL, **Chen PR** (2020) *De novo* thalamic arteriovenous malformation in a boy with a brainstem cavernous malformation. *J Clin Neurosci* 76:226-228.

Lu VM, Shah AH, Eichberg DG, Quinones-Hinojosa A, **Esquenazi Y**, Komotar RJ, Ivan ME (2020) Geographic disparities in access to glioblastoma treatment based on Hispanic ethnicity in the United States: Insights from a national database. *J Neuro-Oncol* 147:711–720.

Madsen JR, Boyle TP, Neuman MI, Park E, Tamber MS, Hickey RW, Heuer GG, Zorc JJ, Leonard JR, Leonard JC, Keating R, Chamberlain JM, Frim DM, Zakrzewski P, Klinge P, Merck LH, Piatt J, Bennett JE, **Sandberg DI**, Boop FA, Hameed MQ (2020) Diagnostic accuracy of non-invasive thermal evaluation of ventriculoperitoneal shunt flow in shunt malfunction: A prospective, multi-site, operator-blinded study. *Neurosurg* doi: 10.1093/neuros/nyaa128. Online ahead of print.

Martín-Noguerol T, Paulano-Godino F, **Riascos RF**, Calabia-Del-Campo J, Márquez-Rivas J, Luna A (2019) Hybrid computed tomography and magnetic resonance imaging 3D printed models for neurosurgery planning. *Ann Transl Med* 7:684.

Mayer L, Kappos L, Racke MK, Rammohan K, Traboulsee A, **Hauser SL**, Julian L, Köndgen H, Li C, Napieralski J, Zheng H, **Wolinsky JS** (2019) Ocrelizumab infusion experience in patients with relapsing and primary progressive multiple sclerosis: Results from the phase 3 randomized OPERA I, OPERA II, and ORATORIO studies. *Mult Scler Rel Dis* 30:236-243.

McCarty JL, Leung LY, Peterson RB, **Sitton CW, Sarraj A, Riascos RF**, Brinjikji W (2019) Ischemic infarction in young adults: A review for radiologists. *Radiographics* 39:1629-1648.

Mejbel HA, Arudra SKC, Pradhan D, Torres-Cabala CA, Nagarajan P, Tetzlaff MT, Curry JL, Ivan D, Duose DY, Luthra R, Prieto VG, **Ballester LY**, Aung PP (2019) Immunohistochemical and molecular features of melanomas exhibiting intratumor and intertumor histomorphologic heterogeneity. *Cancers* 11:1714.

Melin AA, Moffitt J, Hopkins DC, **Shah MN, Sandberg DI**, Teichgraeber JF, Greives MR (2020) Is less actually more? An evaluation of surgical outcomes between endoscopic suturotomy and open cranial vault remodeling for craniosynostosis. *J Craniofac Surg* 31:924-926.

Miller AE, Vermersch P, Kappos L, Comi G, Freedman MS, Oh J, de Seze J, Truffinet P, Benamor M, Purvis A, **Wolinsky JS** (2019) Long-term outcomes with teriflunomide in patients with clinically isolated syndrome: Results of the TOPIC extension study. *Mult Scler Rel Dis* 33:131-138.

Milton R, Shahidi N, **Dragoi** (2020) Dynamic states of population activity in prefrontal cortical networks of freely-moving macaque. *Nat Commun* 11:1948.

Montalban X, Arnold DL, Weber MS, Staikov I, Piasecka-Stryczynska K, Willmer J, **Martin EC**, Dangond F, Syed S, **Wolinsky JS** (2019) Placebo-controlled trial of an oral BTK inhibitor in multiple sclerosis. *N Engl J Med* 380:2406-2417.

Morris SL, Zhu P, Rao M, Martir M, **Zhu JJ**, **Hsu S**, **Ballester LY**, **Day AL**, **Tandon N**, **Kim DH**, Shepard S, **Blanco A**, **Esquenazi Y** (2019) Gamma knife stereotactic radiosurgery in combination with bevacizumab for recurrent glioblastoma. *World Neurosurg* 127:e523-e533.

Moruno-Manchon JF, Lejault P, Wang Y, McCauley B, Honarpisheh P, Morales-Scheihing DA, Singh S, Dang W, Kim N, **Urayama A**, Monchaud D, **McCullough LD**, **Tsvetkov AS** (2020) A small molecule G-quadruplex stabilizer reveals a novel pathway of autophagy regulation in neurons. *eLife* 9:e52283.

Naismith RT, **Wolinsky JS**, Wundes A, LaGanke C, Arnold DL, Obradovic D, Freedman MS, Gudesblatt M, Ziemssen T, Kandinov B, Bidollari I, Lopez-Bresnahan M, Nangia N, Rezendes D, Yang L, Chen H, Liu S, Hanna J, Miller C, Leigh-Pemberton R, on behalf of the EVOLVE-MS-1 study group (2020) Diroximel fumarate (DRF) in patients with relapsing–remitting multiple sclerosis: Interim safety and efficacy results from the phase 3 evolve-ms-1 study. *Mult Scler* doi: 10.1177/1352458519856843.

Naismith RT, Wundes A, Ziemssen T, Jasinska E, Freedman MS, Lembo AJ, Selmaj K, Bidollari I, Chen H, Hanna J, Leigh-Pemberton R, Lopez-Bresnahan M, Lyons J, Miller C, Rezendes D, **Wolinsky JS**, on behalf of the EVOLVE-MS-2 study group (2020) Diroximel fumarate demonstrates an improved gastrointestinal tolerability profile compared with dimethyl fumarate in patients with relapsing-remitting multiple sclerosis: Results from the randomized, double-blind, phase III EVOLVE-MS-2 study. *CNS Drugs* 34:185–196.

Narayana PA, Coronado I, Sujit SJ, Sun X, **Wolinsky JS**, Gabr RE (2020) Are multi-contrast magnetic resonance images necessary for segmenting multiple sclerosis brains? A large cohort study based on deep learning. *Magn Reson Imaging* 65:8-14.

Narayana PA, Coronado I, Sujit SJ, **Wolinsky JS**, Lublin FD, Gabr RE (2020) Deep-learning-based neural tissue segmentation of MRI in multiple sclerosis: Effect of training set size. *J Magn Reson Imaging* 51:1487-96.

Narayana PA, Coronado I, Sujit SJ, **Wolinsky JS**, Lublin FD, Gabr RE (2020) Deep learning for predicting enhancing lesions in multiple sclerosis from non-contrast MRI. *Radiology* 294:398-404.

Nigam S, Pojoga S, **Dragoi V** (2019) Synergistic coding of visual information in columnar networks. *Neuron* 104:402-411.

Patterson SS, Bordt AS, Girresch RJ, Linehan CM, Bauss J, Yeo E, Perez D, Tseng L, Navuluri S, Harris NB, Matthews C, Anderson JR, Kuchenbecker JA, Manookin MB, Ogilvie JM, Neitz J, **Marshak DW** (2020) Wide-field amacrine cell inputs to ON parasol ganglion cells in macaque retina. *J Comp Neurol* 528:1588-1598.

Pollonini L, Miao H, **Ahn H** (2020) Longitudinal effect of transcranial direct current stimulation on knee osteoarthritis patients measured by functional infrared spectroscopy: A pilot study. *Neurophotonics* 7:025004.

Powell-Roach KL, Yao Y, Chamala S, Black V, **Ahn H**, Fillingim R, Ezenwa MO, Jhun E, Schlaeger JM, Suarez ML, Molokie RE, Wang ZJ, Wilkie DJ (2019) Haplotype analysis of COMT SNPS associated with pain intensity and acute care utilization in adults with sickle cell disease. *J Pain* 20:S8.

Rajan A, Heery CR, Thomas A, Mammen AL, Perry S, O'Sullivan Coyne G, Guha U, Berman A, Szabo E, Madan RA, **Ballester LY**, Pittaluga S, Donahue RN, Tsai YT, Lepone LM, Chin K, Ginty F, Sood A, Hewitt SM, Schlom J, Hassan R, Gulley JL (2019) Efficacy and tolerability of anti-programmed death-ligand 1 (PD-L1) antibody (Avelumab) treatment in advanced thymoma. *J Immunother Cancer* 7:269.

Rein T, **Fries GR** (2020) Molecular psychiatry: Trends and study examples. *Int J Mol Sci* 21:459.

Ribeiro M, Díez-Suárez A, **Soutullo C** (2019) Phenomenology and diagnostic stability in pediatric bipolar disorder in a Spanish sample. *J Affective Disord* 242:224-233.

Rocha NP, Colpo GD, Bravo-Alegria J, **Lincoln JA, Wolinsky JS, Lindsey JW, Teixeira AW, Freeman L** (2019) Exploring the relationship between endothelin-1 and peripheral inflammation in multiple sclerosis. *J Neuroimmunol* 326:45-48.

Rosenbaum-Halevi D, Lopez V, Turkmani A, Sanzgiri A, Zeineddine HA, Luong AU, **Chen PR** (2020) A safer endovascular technique for pre-operative embolization of juvenile nasopharyngeal angiofibroma: Avoiding the pitfalls of external carotid artery – internal carotid artery anastomoses. *J Cerebrovasc Endovasc Neurosurg* 22:97-105.

Sandberg DI, Kharas N, Yu B, Janssen CF, Trimble A, Ballester LY, **Patel R**, Mohammad AS, Elmquist WF, **Sirianni RW** (2020) High-dose MTX110 (soluble panobinostat) safely administered into the fourth ventricle in a nonhuman primate model. *J Neurosurg Pediatr* doi: 10.3171/2020.2.PEDS19786. Online ahead of print.

Sarraj A, Hassan AE, **Grotta J, Sitton C**, Cutter G, Cai C, **Chen PR**, Imam B, Pujara D, Arora A, Reddy S, Parsha K, **Riascos RF**, Vora N, Abraham M, Edgell R, Hellinger F, Haussen DC, **Blackburn S, Kamal H, Barreto AD**, Martin-Schild S, Lansberg M, Gupta R, **Savitz S**, Albers GW (2020) Optimizing patient selection for endovascular treatment in acute ischemic stroke (SELECT): A prospective, multicenter cohort study of imaging selection. *Ann Neurol* 87:419-433.

Sarraj A, Hassan AE, **Savitz S, Sitton C, Grotta J, Chen P**, Cai C, Cutter G, Imam B, Reddy S, Parsha K, Pujara D, **Riascos R**, Vora N, Abraham M, **Kamal H**, Haussen DC, **Barreto AD**, Lansberg M, Gupta R, Albers GW (2019) Outcomes of endovascular thrombectomy vs medical management alone in patients with large ischemic scores: A secondary analysis of the optimizing patient's selection for endovascular treatment in acute ischemic stroke (SELECT) study. *JAMA Neurol* 76:1147-1156.

Scaini G, Valvassori SS, Diaz AP, Lima CN, Benevenuto D, **Fries GR, Quevedo J** (2020) Neurobiology of bipolar disorders: a review of genetic components, signaling pathways, biochemical changes, and neuroimaging findings. *Braz J Psychiatry* Online ahead of print.

Shahidi N, Andrei AR, Hu M, **Dragoi V** (2019) High-order coordination of cortical spiking activity modulates perceptual accuracy. *Nat Neurosci* 22:1148-1158.

Shahnawaz M, Mukherjee A, **Pritzkow S**, Mendez N, Rabadia P, Liu X, Hu B, Schmeichel A, Singer W, Wu G, Tsai AL, Shirani H, Nilsson KPR, Low PA, **Soto C** (2020) Discriminating α -synuclein strains in Parkinson's disease and multiple system atrophy. *Nature* 578:273-277.

Smolen P, Baxter DA, Byrne JH (2019) How can memories last for days, years, or a lifetime? Proposed mechanisms for maintaining synaptic potentiation and memory. *Learn Mem* 26:133-150.

Soder HE, Berumen AM, Gomez KE, **Green CE, Suchting R**, Wardle MC, Vincent J, **Teixeira AL, Schmitz JM, Lane SD** (2020) Elevated neutrophil to lymphocyte ratio in older adults with cocaine use disorder as a marker of chronic inflammation. *Clin Psychopharmacol Neurosci* 18:32-40.

Sorkpor S, **Ahn H**, Pollonini L, Do J (2019) Cortical hemodynamic response to contact thermal stimuli in older adults with knee osteoarthritis: a functional near infrared spectroscopy pilot study. *J Pain* 20:S33.

Srinivasan VM, Srivatsan A, Spiotta AM, Hendricks BK, Ducruet, AF, Albuquerque FC, Puri A, Amans MR, Hetts SW, Cooke DL, Ogilvy CS, Thomas AJ, Enriquez-Marulanda Ak, Rai A, Boo S, Carlson, AP, Crowley W, Rangel-Castilla L, Lanzino G, **Chen PR**, Kan P (2019) Early post-market results with PulseRider for Treatment of Broad-Necked Intracranial Aneurysms: a Multicenter Experience. *J Neurosurg* doi:10.3171/2019.5.JNS19313

- Suchting R**, Beard CL, **Schmitz JM**, Soder HE, **Yoon JH**, **Hasan KM**, **Narayana PA**, **Lane SD** (2020) A meta-analysis of tract-based spatial statistics studies examining white matter integrity in cocaine use disorder. *Addict Biol* e12902. doi: 10.1111/adb.12902. Online ahead of print.
- Suchting R**, Colpo GD, Rocha NP, **Ahn H** (2020) The effect of transcranial direct current stimulation on inflammation in older adults with knee osteoarthritis: A Bayesian residual change analysis. *Biol Res Nurs* 22:57-63.
- Suchting R**, **Yoon JH**, San Miguel GG, **Green CE**, **Weaver MF**, Vincent JN, **Fries GR**, **Schmitz JM**, **Lane SD** (2020) Preliminary examination of the orexin system on relapse-related factors in cocaine use disorder. *Brain Res* 1731:146359.
- Takayasu T, **Esquenazi Y**, **Ballester LY** (2020) Plasma cfDNA in glioblastoma-Letter. *Clin Cancer Res* 26:2275.
- Tandon N**, Tong BA, **Friedman ER**, Johnson JA, **Von Allmen G**, **Thomas MS**, **Hope OA**, Kalamangalam GP, **Slater JD**, **Thompson SA** (2019) Analysis of morbidity and outcomes associated with use of subdural grids vs stereoelectroencephalography in patients with intractable epilepsy. *JAMA Neurol* 76:672-681.
- Tannous J, Godlewska BR, Tirumalaraju V, **Soares JC**, Cowen PJ, **Selvaraj S** (2020) Stress, inflammation and hippocampal subfields in depression: A 7 Tesla MRI study. *Transl Psychiatry* 10:78.
- Tetz G, Pinho M, **Pritzkow S**, Mendez N, **Soto C**, Tetz V (2020). Bacterial DNA promotes tau aggregation. *Scientific Reports* 10:2369.
- Tirumalaraju V, **Suchting R**, Evans J, Goetzl L, Refuerzo J, Neumann A, Anand D, Ravikumar R, Green CE, Cowen PJ, **Selvaraj S** (2020) Risk of Depression in the Adolescent and Adult Offspring of Mothers with Perinatal Depression: A Systematic Review and Meta-Analysis. *JAMA Netw Open* 3:e208783.
- Trimble DJ, Parker SL, Zhu L, **Cox CS**, **Kitagawa RS**, **Fletcher SA**, **Sandberg DI**, **Shah MN** (2020) Outcomes and prognostic factors of pediatric patients with a Glasgow Coma Score of 3 after blunt head trauma. *Childs Nerv Syst* doi: 10.1007/s00381-020-04637-z. Online ahead of print.
- Turner B, Cree BAC, Kappos L, Montalban X, Papeix C, **Wolinsky JS**, Buffels R, Fiore D, Garren H, Han J, **Hauser SL** (2019) Ocrelizumab efficacy in subgroups of patients with relapsing multiple sclerosis. *J Neurology* 266:1182-1193.
- Vallejo-Valdivielso M, de Castro-Manglano P, Diez-Suarez A, Marin-Mendez JJ, **Soutullo CA** (2019) Clinical and neuropsychological predictors of methylphenidate response in children and adolescents with ADHD: A naturalistic follow-up study in a Spanish sample. *Clin Pract Epidemiol Ment Health* 15:160-171.
- Valvassori SS, Tonin PT, Dal-Pont GC, Varela RB, Cararo JH, Garcia AF, Gava FF, Menegas S, **Soares JC**, **Quevedo J** (2019) Coadministration of lithium and celecoxib reverses manic-like behavior and decreases oxidative stress in a dopaminergic model of mania induced in rats. *Transl Psychiatry* 9:297.
- Vantaku V, Dong J, Ambati CR, Perera D, Donepudi SR, Amara CS, Putluri V, Ravi SS, Robertson MJ, Piyarathna DWB, Villanueva M, von Rundstedt FC, Karanam B, **Ballester LY**, Terris MK, Bollag RJ, Lerner SP, Apolo AB, Villanueva H, Lee M, Sikora AG, Lotan Y, Sreekumar A, Coarfa C, Putluri N (2019) Multi-omics integration analysis robustly predicts high-grade patient survival and identifies CPT1B effect on fatty acid metabolism in bladder cancer. *Clin Cancer Res* 25:3689-3701.
- Viola TW, **Fries GR** (2019) A promising era for epigenetic research: revealing the molecular signature of neuropsychiatric disorders. *Braz J Psychiatry* 41:469-470.

Wolinsky JS, Engmann NJ, Pei J, Pradhan A, Markowitz C, Fox EJ (2020) An exploratory analysis of the efficacy of ocrelizumab in patients with multiple sclerosis with increased disability. *Mult Scler J Exp Transl Clin* 6:2055217320911939.

Wong ICK, Banaschewski T, Buitelaar J, Cortese S, Döpfner M, Simonoff E, Coghill D, Asherson P, Santosh P, Sonuga-Barke EJ, Taylor E, Daley D, Hollis C, Ferrin M, Dittmann RW, Holtmann M, Rothenberger A, Brandeis D, Steinhausen HC, Buitelaar J, Danckaerts M, van der Oord S, Konofal E, Lecendreux M, **Soutullo C**, Stringaris A, Zuddas A (2019) Emerging challenges in pharmacotherapy research on ADHD – Outcome measures beyond symptom control and clinical trials. *Lancet Psychiatry* 6:528-537.

Yan Y, Takayasu T, Hines H, Dono A, **Hsu S, Zhu JJ, Riascos-Castaneda R, Kamali A**, Bhattacharjee MB, **Blanco A, Tandon N, Kim D, Ballester LY, Esquenazi Y** (2020) PI3K genomic alterations: a favorable prognostic factor in IDH-wild type glioblastoma. *JCO Precis Oncol* in April 2020.

Younes K, **Gonzales NR, Sarraj A, Bonfante E, Jagolino-Cole A** (2019) Hepatic Encephalopathy Mimicking Acute Dominant Middle Cerebral Artery Ischemic Stroke: A Case Report. *Case Rep Neurol* 11:304-311.

Younes K, **Hasan KM, Kamali A**, McGough CE, Keser Z, Hasan O, Melicher T, Kramer LA, **Schulz PE** (2019) Diffusion tensor imaging of the superior thalamic radiation and cerebrospinal fluid distribution in idiopathic normal pressure hydrocephalus. *J Neuroimaging* 29:242-251.

Zeineddine HA, Dono A, **Kitagawa R, Savitz SI, Choi HA, Chang TR, Ballester LY, Esquenazi Y** (2020) Endoscopic third ventriculostomy for hydrocephalus secondary to extraventricular obstruction in thalamic hemorrhage: A case series. *Oper Neurosurg* 0:1-9.

Zeineddine HA, Lopea-Rivera V, Conner CR, Sheriff FG, Choi P, Inam ME, **Cochran J, Chen PR** (2020) Embolization of carotid-cavernous fistula: A technical note on simultaneous balloon protection of the internal carotid artery. *J Clin Neurosci* S0967-5868(20)30206-X.

Zhang X, Yang M, Du X, Liao W, Chen D, Fan F, Xiu M, Jia Q, Ning Y, Huang X, Wu F, **Soares JC, Cao B, Wang L, Chen H** (2019) Glucose disturbances, cognitive deficits and white matter abnormalities in first-episode drug-naive schizophrenia. *Mol Psychiatry* Aug 13. doi: 10.1038/s41380-019-0478-1.

Zhu B, **Sevick-Muraca EM**, Nguyen RD, **Shah MN** (2020) Cap-based transcranial optical tomography in an awake infant. *IEEE Trans Med Imaging* doi: 10.1109/TMI.2020.2990823. Online ahead of print.

Zhu P, Du XL, Blanco AI, **Ballester LY**, Tandon N, Berger MS, Zhu JJ, **Esquenazi Y** (2019) Impact of facility type and volume in low-grade glioma outcomes. *J Neurosurg* September 27; 1-11.

Books

Martín-Lunas Gorriti M, **Soutullo C** (Prólogo Pau Donés). *Mi vida con un TDAH (Spanish) [My life with ADHD]*. Libros.com 2020. Digital ISBN: 978-84-17993-05-4. Madrid, Spain, 2020