



MARIO EDUARDO FLORES SOTO

INVESTIGADOR ASOCIADO



DOCTOR EN CIENCIAS

ÁREA NEUROCIENCIAS

LÍNEAS DE INVESTIGACIÓN

ESTRÉS OXIDATIVO EN SISTEMA
NERVIOSO CENTRAL
EXICITOXICIDAD
PLASTICIDAD NEURAL
ENVEJECIMIENTO

EXPERTO EN ENFERMEDADES NEURODEGENERATIVAS

ARTÍCULOS PUBLICADOS

[Pirfenidone Attenuates Microglial Reactivity and Reduces Inducible Nitric Oxide Synthase mRNA Expression After Kainic Acid-Mediated Excitotoxicity in Pubescent Rat Hippocampus.](#) Castro-Torres RD, Chaparro-Huerta V, Flores-Soto ME, Jave-Suárez L, Camins A, Armendáriz-Borunda J, Beas-Zárate C, Mena-Munguía S. J Mol Neurosci. 2015 Jun;56(2):245-54. doi: 10.1007/s12031-015-0509-6. Epub 2015 Feb 18. PMID: 25854776

[Guineensine is a novel inhibitor of endocannabinoid uptake showing cannabimimetic behavioral effects in BALB/c mice.](#) Nicolussi S, Viveros-Paredes JM, Gachet MS, Rau M, Flores-Soto ME, Blunder M, Gertsch J. Pharmacol Res. 2014 Feb;80:52-65. doi: 10.1016/j.phrs.2013.12.010. Epub 2014 Jan 8. PMID: 24412246

[Natural polymorphisms and unusual mutations in HIV-1 protease with potential antiretroviral resistance: a bioinformatic analysis.](#) Mata-Munguía C, Escoto-Delgadillo M, Torres-Mendoza B, Flores-Soto M, Vázquez-Torres M, Gálvez-Gastelum F, Viniegra-Osorio A, Castellero-Manzano M, Vázquez-Valls E. BMC Bioinformatics. 2014 Mar 15;15:72. doi: 10.1186/1471-2105-15-72. PMID: 24629078

[A single dose of pirfenidone attenuates neuronal loss and reduces lipid peroxidation after kainic acid-induced excitotoxicity in the pubescent rat hippocampus.](#) Castro-Torres RD, Chaparro-Huerta V, Flores-Soto ME, Bañuelos-Pineda J, Camins A, Orozco-Suárez SA, Armendáriz-Borunda J, Beas-Zárate C. J Mol Neurosci. 2014 Feb;52(2):193-201. doi: 10.1007/s12031-013-0121-6. Epub 2013 Oct 20. PMID: 24142572

[Neural restrictive silencer factor and choline acetyltransferase expression in cerebral tissue of Alzheimer's Disease patients: A pilot study.](#) González-Castañeda RE, Sánchez-González VJ, Flores-Soto M, Vázquez-Camacho G, Macías-Islas MA, Ortiz GG. Genet Mol Biol. 2013 Mar;36(1):28-36. doi: 10.1590/S1415-47572013000100005. Epub 2013 Mar 4. PMID: 23569405

[Receptor to glutamate NMDA-type: the functional diversity of the nr1 isoforms and pharmacological properties.](#) Flores-Soto ME, Chaparro-Huerta V, Escoto-Delgadillo M, Ureña-Guerrero ME, Camins A, Beas-Zarate C. Curr Pharm Des. 2013;19(38):6709-19. PMID: 23530508

[Plastic changes in dendritic spines of hippocampal CA1 pyramidal neurons from ovariectomized rats after estradiol treatment.](#) Velázquez-Zamora DA, González-Tapia D, González-Ramírez MM, Flores-Soto ME, Vázquez-Valls E, Cervantes M, González-Burgos I. Brain Res. 2012 Aug 27;1470:1-10. doi: 10.1016/j.brainres.2012.06.012. Epub 2012 Jun 29. PMID: 22750586

[5-HT denervation of the adult rat prefrontal cortex induces changes in the expression of \$\alpha 4\$ and \$\alpha 7\$ nicotinic acetylcholine receptor subtypes.](#) Soria-Fregozo C, Flores-Soto ME, Pérez-Vega MI, Feria-Velasco A. Neurologia. 2013 May;28(4):212-8. doi: 10.1016/j.nrl.2012.04.002. Epub 2012 Jun 15. English, Spanish. PMID: 22703630

[\[Structure and function of NMDA-type glutamate receptor subunits\].](#) Flores-Soto ME, Chaparro-Huerta V, Escoto-Delgadillo M, Vazquez-Valls E, González-Castañeda RE, Beas-Zarate C. Neurologia. 2012 Jun;27(5):301-10. doi: 10.1016/j.nrl.2011.10.014. Epub 2012 Jan 2. Review. Spanish. PMID: 22217527

[\[Expression of NMDA receptor subunits in rat prefrontal cortex with CCL4-induced hepatic damage after a treatment with Rosmarinus officinalis L\].](#) Soria Fregozo C, Miranda Beltrán ML, Flores Soto ME, Pérez Vega MI, Beas Zárate C, Huacuja Ruiz L. Neurologia. 2012 Jun;27(5):261-7. doi: 10.1016/j.nrl.2011.10.010. Epub 2012 Jan 2. Spanish. PMID: 22217522

[HIF-1 \$\alpha\$ expression in the hippocampus and peripheral macrophages after glutamate-induced excitotoxicity.](#) Vazquez-Valls E, Flores-Soto ME, Chaparro-Huerta V, Torres-Mendoza BM, Gudiño-Cabrera G, Rivera-Cervantes MC, Pallas M, Camins A, Armendáriz-Borunda J, Beas-Zarate C. J Neuroimmunol. 2011 Sep 15;238(1-2):12-8. doi: 10.1016/j.jneuroim.2011.06.001. Epub 2011 Jul 31. PMID: 21807419

[Expression of HIF-1 alpha, VEGF and EPO in peripheral blood from patients with two cardiac abnormalities associated with hypoxia.](#) Lemus-Varela ML, Flores-Soto ME, Cervantes-Munguía R, Torres-Mendoza BM, Gudiño-Cabrera G, Chaparro-Huerta V, Ortuño-Sahagún D, Beas-Zárate C. Clin Biochem. 2010 Feb;43(3): 234-9. doi: 10.1016/j.clinbiochem.2009.09.022. Epub 2009 Oct 3. PMID: 19804771



[Excitotoxic neonatal damage induced by monosodium glutamate reduces several GABAergic markers in the cerebral cortex and hippocampus in adulthood.](#) Ureña-Guerrero ME, Orozco-Suárez S, López-Pérez SJ, Flores-Soto ME, Beas-Zárate C. Int J Dev Neurosci. 2009 Dec;27(8):845-55. doi: 10.1016/j.ijdevneu.2009.07.011. Epub 2009 Sep 4. PMID: 19733649

[Changes in hippocampal NMDA-R subunit composition induced by exposure of neonatal rats to L-glutamate.](#) Rivera-Cervantes MC, Flores-Soto ME, Chaparro-Huerta V, Reyes-Gómez J, Feria-Velasco A, Schliebs R, Beas-Zárate C. Int J Dev Neurosci. 2009 Apr;27(2): 197-204. doi: 10.1016/j.ijdevneu.2008.09.006. Epub 2008 Sep 27. PMID: 18930801

[Role of p38 MAPK and pro-inflammatory cytokines expression in glutamate-induced neuronal death of neonatal rats.](#) Chaparro-Huerta V, Flores-Soto ME, Gudiño-Cabrera G, Rivera-Cervantes MC, Bitzer-Quintero OK, Beas-Zárate C. Int J Dev Neurosci. 2008 Aug; 26(5):487-95. doi: 10.1016/j.ijdevneu.2008.02.008. Epub 2008 Mar 4. PMID: 18396383

[The expression and binding of kainate receptors is modified in different brain regions by glutamate neurotoxicity during postnatal rat development.](#) Beas-Zárate C, Ureña-Guerrero ME, Flores-Soto M, Armendariz-Borunda J, Ortuño-Sahagún D. Int J Dev Neurosci. 2007 Feb;25(1):53-61. Epub 2006 Dec 1. PMID: 17141463

[Critical ischemia time in a model of spinal cord section. A study performed on dogs.](#) Bitar Alatorre WE, Garcia Martinez D, Rosales Corral SA, Flores Soto ME, Velarde Silva G, Portilla de Buen E. Eur Spine J. 2007 Apr; 16(4):563-72. Epub 2006 Sep 23. PMID: 17024402

[Neuronal damage and changes in the expression of muscarinic acetylcholine receptor subtypes in the neonatal rat cerebral cortical upon exposure to sparteine, a quinolizidine alkaloid.](#) Flores-Soto ME, Bañuelos-Pineda J, Orozco-Suárez S, Schliebs R, Beas-Zárate C. Int J Dev Neurosci. 2006 Oct;24(6):401-10. Epub 2006 Jul 14. PMID: 16843632

[Neuronal cell death due to glutamate excitotoxicity is mediated by p38 activation in the rat cerebral cortex.](#) Segura Torres JE, Chaparro-Huerta V, Rivera Cervantes MC, Montes-González R, Flores Soto ME, Beas-Zárate C. Neurosci Lett. 2006 Aug 7;403(3):233-8. Epub 2006 Jun 19. PMID: 16782274

[NR1, NR2A and NR2C subunits expression after cervical spinal cord transplant and section in dogs.](#) Alatorre WE, Flores Soto ME, Beas Zarate C. Neurochem Int. 2005 Dec;47(7):491-8. PMID: 16099549

[Proinflammatory cytokines and apoptosis following glutamate-induced excitotoxicity mediated by p38 MAPK in the hippocampus of neonatal rats.](#) Chaparro-Huerta V, Rivera-Cervantes MC, Flores-Soto ME, Gómez-Pinedo U, Beas-Zárate C. J Neuroimmunol. 2005 Aug;165(1-2):53-62. PMID: 15972237

[NMDAR-2C and 2D subunits gene expression is induced in brain by neonatal exposure of monosodium L-glutamate to adult rats.](#) Beas-Zárate C, Flores-Soto ME, Armendariz-Borunda J. Neurosci Lett. 2002 Mar 15;321(1-2):9-12. PMID: 11872244





CAPÍTULOS EN LIBROS

- Beas Zarate C, Flores Soto ME, Vazquez Valls E, Rivera Cervantes MC. [Integración Funcional del Receptor NMDA en el SNC](#). En: Beas Zarate C, Ureña Guerrero M, Lliberia Caminis P. (Eds). Tópicos de Actualización en Neurobiología. Procesos Cognitivos y Mecanismos de Neurodegeneración. Editado por la Universidad de Guadalajara y por la Universidad de Barcelona. México 2010 ISBN: 978-970-764-486-1
- Beas Zarate C, Chaparro Huerta V, Flores Soto ME, Armendáriz Borunda JS. [Transcripción del Ácido Ribonucleico](#). En: Beas Zarate C, Ortuño Sahagun D, Armendáriz Borunda JS. (Eds). Biología Molecular: Fundamentos y Aplicaciones. McGraw Hill Interamericana. 2009. ISBN: 978-979-10-6921-9
- Torres Mendoza B, Flores Soto ME, Vazquez Valls E. [Deterioro Neurocognitivo en el Síndrome de Inmunodeficiencia Adquirida](#). En: Gonzalez Burgos I. (Ed). Psicobiología de la Memoria. Un enfoque Multidisciplinario. Bios-Médica Editores. México, 2015. ISBN 968-9115-05-7



DISTINCIONES

- Distinción de *Investigador Nacional Nivel I*, otorgado por el Sistema Nacional de Investigadores – CONACYT.