

Año 2014

Artículos.

- Acosta MC., Luna C., Quirce S., Belmonte C., Gallar J.(2014) Corneal Sensory Nerve Activity in an Experimental Model of UV Keratitis. *Invest. Ophthalmol. Vis. Sci.* 55(6):3403-3412 [PubMed](#)
- Alcaraz-Iborra M., Carvajal F., Lerma-Cabrera JM., Valor LM., Cubero I.(2014) Binge-like consumption of caloric and non-caloric palatable substances in ad libitum-fed C57BL/6J mice: pharmacological and molecular evidence of orexin involvement. *Behav. Brain Res.* 272:93-99 [PubMed](#)
- Almaraz L., Manenschijn JA., De la Peña E., Viana F.(2014) TRPM8. *Handbook of experimental pharmacology* 222:547-579 [PubMed](#)
- Alvarez-Salvado E., Pallares V., Moreno A., Canals S.(2014) Functional MRI of long-term potentiation: imaging network plasticity. *Philos. Trans. R. Soc. B-Biol. Sci.* 369(1633):20130152-20130152 [PubMed](#)
- Balmaceda V., Cuchillo-Ibañez I., Pujadas L., Garcia-Ayllon MS., Saura CA., Nimpf J., Soriano E., Saez-Valero J.(2014) ApoER2 processing by presenilin-1 modulates reelin expression. *Faseb J.* 28(4):1543-1554 [PubMed](#)
- Balsera B., Mulet J., Fernandez-Carvajal A., Torre-Martinez Rde L., Ferrer-Montiel A., Hernandez-Jimenez JG, Estevez-Her, Borges R., Freitas AE., Lopez MG., Garcia-Lopez MT., Gonzalez-Muñiz R., Perez de Vega MJ., Valor LM., Svobodova L., Sala S., Sala F., Criado M.(2014) Chalcones as positive allosteric modulators of α -7 nicotinic acetylcholine receptors: A new target for a privileged structure. *Eur. J. Med. Chem.* 86:724-739 [PubMed](#)
- Barco A.(2014) La materia de los recuerdos: circuitos neuronales y cascadas moleculares. *Mente y Cerebro: cuadernos n° 9.* *Mente y Cerebro* 9:18-27
- Barco A.(2014) Neuroepigenetic disorders: Progress, promises and challenges. *Neuropharmacology* 80:1-2 [PubMed](#)
- Becker W., Soppa U., Tejedor FJ.(2014) DYRK1A: A Potential Drug Target for Multiple Down Syndrome Neuropathologies. *CNS Neurol. Disord.-Drug Targets* 13(1):26-33 [PubMed](#)
- Benjumbeda I., Molano-Mazon M., Martinez LM.(2014) Flowers and weeds: cell-type specific pruning in the developing visual thalamus. *BMC Biol.* 12:3-3 [PubMed](#)
- Bi CW., Luk WK., Campanari ML., Liu YH., Xu L., Lau KM., Xu ML., Choi RC., Saez-Valero J., Tsim KW.(2014) Quantification of the transcripts encoding different forms of AChE in various cell types: real-Time PCR coupled with standards in revealing the copy number. *J. Mol. Neurosci.* 53(3):461-468 [PubMed](#)
- Borrell V., Calegari F.(2014) Mechanisms of brain evolution: Regulation of neural progenitor cell diversity and cell cycle length. *Neurosci. Res.* 86C:14-24 [PubMed](#)
- Borrell V., Gotz M.(2014) Role of Radial Glia cells in cerebral cortex folding. *Curr. Opin. Neurobiol.* 27C:39-46 [PubMed](#)
- Bradke F., Marin O.(2014) Editorial overview: development and regeneration: nervous system development and regeneration. *Curr. Opin. Neurobiol.* 27:iv-vi [PubMed](#)

Año 2014

- Campanari ML., Garcia-Ayllon MS., Belbin O., Galceran J., Lleo A., Saez-Valero J.(2014) Acetylcholinesterase Modulates Presenilin-1 Levels and γ -Secretase Activity. *Journal Alzheimer Disease*. 41(3):911-924 [PubMed](#)
- Campanari ML., Garcia-Ayllon MS., Blazquez-Llorca L., Luk WKW., Tsim K., Saez-Valero J.(2014) Acetylcholinesterase Protein Level Is Preserved in the Alzheimer's Brain . *J. Mol. Neurosci*. 53(3):446-453 [PubMed](#)
- Carron R., Filipchuk A., Nardou R., Singh A., Michel FJ., Humphries MD., Hammond C.(2014) Early hypersynchrony in juvenile PINK1^{-/-}-motor cortex is rescued by antidromic stimulation. *Front Syst Neurosci*. 8:95-95 [PubMed](#)
- Caspani EM., Crossley PH., Redondo-Garcia C., Martinez S.(2014) Glioblastoma: a pathogenic crosstalk between tumor cells and pericytes. *PLoS ONE* 9(7):e101402 [PubMed](#)
- Catala-Lopez F., Suarez-Pinilla M., Suarez-Pinilla P., Valderas JM., Gomez-Beneyto M., Martinez S., Balanza-Martinez V., Climent J., Valencia A., McGrath J., Crespo-Facorro B., Sanchez-Moreno J., Vieta E., Tabares-Seisdedor R.(2014) Inverse and Direct Cancer Comorbidity in People with Central Nervous System Disorders: A Meta-Analysis of Cancer Incidence in 577,013 Participants of 50 Observational Studies. *Psychother. Psychosom*. 83(2):89-105 [PubMed](#)
- Ciceri G., Dehorter N.(2014) Organization of lineages of the cerebral cortex interneurons. *M S-Med.Sci*. 30(2):144-146 [PubMed](#)
- Cruz-Martinez P., Martinez-Ferre A., Jaramillo-Merchan J., Estirado A., Martinez S., Jones J.(2014) FGF8 activates proliferation and migration in mouse post-natal oligodendrocyte progenitor cells. *PLoS ONE* 9(9):e108241 [PubMed](#)
- Cruz-Martinez P., Pastor D., Estirado A., Pacheco-Torres J., Martinez S., Jones J.(2014) Stem cell injection in the hindlimb skeletal muscle enhances neurorepair in mice with spinal cord injury. *Regen. Med*. 9(5):579-591 [PubMed](#)
- Dehorter N., Hammond C.(2014) Giant GABAA receptor mediated currents in the striatum, a common signature of Parkinson's disease in pharmacological and genetic rodent models. *Basal Ganglia* 3(4):197-201
- de-Madaria E., Del Mar Frances M., Gea-Sorli S., Gutierrez LM., Viniegra S., Perez-Mateo M., Closa D., Lopez-Font I.(2014) Role of Protease-Activated Receptor 2 in Lung Injury Development During Acute Pancreatitis in Rats. *Pancreas* 43(6):895-902 [PubMed](#)
- Descalzo VF., Gallego R., Sanchez-Vives MV.(2014) Adaptation in the visual cortex: Influence of membrane trajectory and neuronal firing pattern on slow afterpotentials *PLoS ONE* 9(11) [PubMed](#)
- Diaz-Quesada M., Martini FJ., Ferrati G., Bureau I., Maravall M.(2014) Diverse Thalamocortical Short-Term Plasticity Elicited by Ongoing Stimulation. *J. Neurosci*. 34(2):515-526 [PubMed](#)
- Dominguez M.(2014) Editorial.Cancer models in Drosophila. *Semin. Cell Dev. Biol*. 28:62-62 [PubMed](#)
- Dominguez M.(2014) Oncogenic programmes and Notch activity: An 'organized crime'? *Semin. Cell Dev. Biol*. 28:78-85 [PubMed](#)

Año 2014

- Erskine L., Herrera E.(2014) Connecting the Retina to the Brain. *ASN Neuro* 6:6 [PubMed](#)
- Garcia-Ayllon MS., Campanari ML., Montenegro MF., Cuchillo-Ibañez I., Belbin O., Lleo A., Tsim K., Vidal CJ., Saez-Valero J.(2014) Presenilin-1 influences processing of the acetylcholinesterase membrane anchor PRiMA. *Neurobiol. Aging* 35(7):1526-1536 [PubMed](#)
- Garel S., Lopez-Bendito G.(2014) Inputs from the thalamocortical system on axon pathfinding mechanisms. *Curr. Opin. Neurobiol.* 27:143-150 [PubMed](#)
- Gil A., Gonzalez-Velez V., Segura J., Gutierrez LM.(2014) A theoretical study of factors influencing calcium-secretion coupling in a presynaptic active zone model. *Math. Biosci. Eng.* 11(5):1027-1043 [PubMed](#)
- Gonzalez-Coto AF., Alonso-Ron C., Alcalde I., Gallar J., Meana A., Merayo-Llodes J., Belmonte C.(2014) Expression of Cholecystokinin, Gastrin, and Their Receptors in the Mouse Cornea. *Invest. Ophthalmol. Vis. Sci.* 55(3):1965-1975 [PubMed](#)
- Ito S., Magalska A., Alcaraz-Iborra M., Lopez-Atalaya JP., Rovira V., Contreras-Moreira B., Lipinski M., Olivares R., Martinez-Hernandez J., Ruszczycycki B., Lujan R., Geijo-Barrientos E., Wilczynski GM., Barco A.(2014) Loss of neuronal 3D chromatin organization causes transcriptional and behavioural deficits related to serotonergic dysfunction. *Nat. Commun.* 5:4450 [PubMed](#)
- Jego P., Pacheco-Torres J., Araque A., Canals S.(2014) Functional MRI in mice lacking IP3-dependent calcium signaling in astrocytes. *J. Cereb. Blood Flow Metab.* 34(10):1599-15603 [PubMed](#)
- Jemal I., Soriano S., Conte AL., Morenilla C., Gomis A.(2014) G protein-coupled receptor signalling potentiates the osmo-mechanical activation of TRPC5 channels. *Pflugers Arch.* 466:1635-1646 [PubMed](#)
- Kielar M., Tuy FPD., Bizzotto S., Lebrand C., De Juan Romero C., Poirier K., Oegema R., Mancini GM., Bahi-Buisson N., Olasso R., LeMoing A., Boutourlinsky K., Boucher D., Carpentier W., Berquin P., Deleuze J., Belvindrah J., Borrell V., Welker E., Chelly J., Croquelois A., Francis F.(2014) Mutations in Eml1 lead to ectopic progenitors and neuronal heterotopia in mouse and human. *Nat. Neurosci.* 17(7):923-933 [PubMed](#)
- Lee SY., Ramirez J., Franco M., Lectez B., Gonzalez M., Barrio R., Mayor U.(2014) Ube3a, the E3 ubiquitin ligase causing Angelman syndrome and linked to autism, regulates protein homeostasis through the proteasomal shuttle Rpn10. *Cellular and Molecular Life Sciences* 71(14):2747-2758 [PubMed](#)
- Lerma J., De Carlos JA.(2014) Epilog: Cajal's unique and legitimated school. *Front Neuroanat* 8(58): [PubMed](#)
- Leyva-Diaz E., del Toro D., Menal MJ., Cambray S., Susin R., Tessier-Lavigne M., Klein R., Egea J., Lopez-Bendito G.(2014) FLRT3 Is a Robo1-Interacting Protein that Determines Netrin-1 Attraction in Developing Axons. *Curr. Biol.* 24(5):494-508 [PubMed](#)
- Lopez-Atalaya J., Barco A.(2014) Can changes in histone acetylation contribute to memory formation? *Trends Genet.* 30(12):529-539 [PubMed](#)
- Lopez-Atalaya JP., Valor LM., Barco A.(2014) Epigenetic factors in intellectual disability: the Rubinstein-Taybi syndrome as a paradigm of neurodevelopmental disorder with epigenetic origin. *Prog. Molec. Biol. Transl. Sci.* 128:139-176 [PubMed](#)

Año 2014

- Ma TC., Barco A., Ratan RR., Willis DE.(2014) cAMP Responsive Element Binding Protein (CREB) and cAMP Co-regulate Activator Protein 1 (AP1)-Dependent Regeneration-Associated Gene Expression and Neurite Growth. *J. Biol. Chem.* 289(47):32914-32925 [PubMed](#)
- Maravall M., Diamond ME.(2014) Algorithms of whisker-mediated touch perception. *Curr. Opin. Neurobiol.* 25:176-186 [PubMed](#)
- Marin O., Muller U.(2014) Lineage origins of GABAergic versus glutamatergic neurons in the neocortex *Curr. Opin. Neurobiol.* 26:132-141 [PubMed](#)
- Martinez-Frias ML., Oejo-Vinyals JG., Arteaga R., Martinez-Fernandez ML., Macdonald A., Perez-Belmonte E., Bermejo-Sanchez E., Martinez S.(2014) Interstitial deletion 14q22.3-q23.2: Genotype-phenotype correlation. *Am. J. Med. Genet. A* 164(3):639-647 [PubMed](#)
- Martinez-Martinez MA., Pacheco-Torres J., Borrell V., Canals S.(2014) Phenotyping the central nervous system of the embryonic mouse by magnetic resonance microscopy. *NeuroImage* 97:95-106 [PubMed](#)
- Martinez-Otero LM., Molano-Mazon M., Wang X., Sommer FT., Hirsch JA.(2014) Statistical Wiring of Thalamic Receptive Fields Optimizes Spatial Sampling of the Retinal Image. *Neuron* 81(4):943-956 [PubMed](#)
- Mecklenburg N., Martinez-Lopez JE., Moreno-Bravo JA., Perez-Balaguer A., Puelles E., Martinez S.(2014) Growth and differentiation factor 10 (Gdf10) is involved in Bergmann glial cell development under Shh regulation *Glia* 62(10):1713-1723 [PubMed](#)
- Meseguer V., Alpizar YA., Luis E., Tajada S., Denlinger B., Fajardo O., Manenschijn JA., Fernandez-Peña C., Talavera A., Kichko T., Navia B., Sanchez A., Señaris R., Reeh P., Perez-Garcia MT., Lopez-Lopez JR., Voets T., Belmonte C., Talavera K., Viana F.(2014) TRPA1 channels mediate acute neurogenic inflammation and pain produced by bacterial endotoxins. *Nat. Commun.* 5:3125-3125 [PubMed](#)
- Monsalve EM., Garcia-Gutierrez MS., Navarrete F., Giner S., Laborda J., Manzanares J.(2014) Abnormal Expression Pattern of Notch Receptors, Ligands, and Downstream Effectors in the Dorsolateral Prefrontal Cortex and Amygdala of Suicidal Victims . *Mol. Neurobiol.* 49(2):957-965 [PubMed](#)
- Morenilla-Palao C., Luis E., Fernandez-Peña C., Quintero E., Weaver JL., Bayliss DA., Viana F.(2014) Ion Channel Profile of TRPM8 Cold Receptors Reveals a Role of TASK-3 Potassium Channels in Thermosensation. *Cell Reports* 8(5):1571-1582 [PubMed](#)
- Moreno-Bravo JA., Perez-Balaguer A., Martinez-Lopez JE., Aroca P., Puelles L., Martinez S., Puelles E.(2014) Role of Shh in the development of molecularly characterized tegmental nuclei in mouse rhombomere 1. *Brain Struct Funct* 219(3):777-792 [PubMed](#)
- Navarrete F., Rubio G., Manzanares J.(2014) Effects of naltrexone plus topiramate on ethanol self-administration and tyrosine hydroxylase gene expression changes. *Addict. Biol.* 19(5):862-873 [PubMed](#)
- Navarro AI., Rico B.(2014) Focal adhesion kinase function in neuronal development. *Curr. Opin. Neurobiol.* 27:89-95 [PubMed](#)
- Parra A., Gonzalez-Gonzalez O., Gallar J., Belmonte C.(2014) Tear fluid hyperosmolality increases nerve impulse activity of cold thermoreceptor endings of the cornea. *Pain* 155(8):1481-1491 [PubMed](#)

Año 2014

- Pertusa M., Gonzalez A., Hardy P., Madrid R., Viana F.(2014) Bidirectional modulation of thermal and chemical sensitivity of TRPM8 channels by the initial region of the N-terminal domain. *J. Biol. Chem.* 289(32):21828-21843 [PubMed](#)
- Ruiz M., Martinez-Vidal AF., Morales JM., Monleon D., Gimenez-Ribotta M.(2014) Neurodegenerative changes are prevented by Erythropoietin in the pmn model of motoneuron degeneration. *Neuropharmacology* 83:137-153 [PubMed](#)
- Scott RS., Henneberger C., Padmashri R., Anders S., Jensen T., Rusakov DA.(2014) Neuronal adaptation involves rapid expansion of the action potential initiation site. *Nat. Commun.* 5:3817-3817 [PubMed](#)
- Segev I., Martinez LM., Zatorre RJ.(2014) Brain and art. *Front. Hum. Neurosci.* 8:465 [PubMed](#)
- Sharif NA., Li L., Katoli P., Xu S., Veltman J., Li B., Scott D., Wax M., Gallar J., Acosta C., Belmonte C.(2014) Preclinical pharmacology, ocular tolerability and ocular hypotensive efficacy of a novel non-peptide bradykinin mimetic small molecule. *Exp. Eye Res.* 128:170-180 [PubMed](#)
- Soppa U., Schumacher J., Florencio V., Pasqualon T., Tejedor FJ., Becker W.(2014) The Down syndrome-related protein kinase DYRK1A phosphorylates p27(Kip1) and Cyclin D1 and induces cell cycle exit and neuronal differentiation. *Cell Cycle* 13(13):2084-2100 [PubMed](#)
- Teixeira CM., Masachs N., Muhaisen A., Bosch C., Perez-Martinez J., Howell B., Soriano E.(2014) Transient Downregulation of Dab1 Protein Levels during Development Leads to Behavioral and Structural Deficits: Relevance for Psychiatric Disorders. *Neuropsychopharmacology* 39(3):556-568 [PubMed](#)
- Thompson CL.,Ng L., Menon V., Martinez S., Lee CK.,Glattfelder K.,Sunkin SM., Henry A., Lau C.,Dang C., Garcia-Lopez R., Martinez-Ferre A., Pombero A., Rubenstein JLR.,Wakeman WB..., ...Hawrylycz MJ.,Puelles L.,Jones AR.(2014) A High-Resolution Spatiotemporal Atlas of Gene Expression of the Developing Mouse Brain. *Neuron* 83(2):309-323 [PubMed](#)
- Valor LM., Guiretti D.(2014) What's wrong with epigenetics in Huntington's disease? *Neuropharmacology* 80:103-114 [PubMed](#)
- van den Berghe V., Stappers E., Seuntjens E.(2014) How cell-autonomous is neuronal migration in the forebrain? *Molecular cross-talk at the cell membrane. Neuroscientist* 20(6):571-575 [PubMed](#)
- Vazquez-Romero A., Criado M., Messeguer A., Vidal-Mosquera M., Mulet J., Sala F., Sala S.(2014) Effect of triazine derivatives on neuronal nicotinic receptors *ACS Chem. Neurosci.* 5(8):683-689 [PubMed](#)
- Vigh L.,Torok Z., Crul T., Maresca B.,Schutz GJ., Viana F., Dindia L,Piotto S., Brameshuber M., Balogh G., Peeter M., Porta A., Trapani A.,Gombos I.,Glatz A., Gungor B., ... , Hooper PL., Harwood JL., Vigh L.(2014) Plasma membranes as heat stress sensors: From lipid-controlled molecular switches to therapeutic applications. *Biochim. Biophys. Acta-Biomembr.* 1838(6):1594-1618 [PubMed](#)
- Villanueva J., Viniegra S., Gimenez-Molina Y., Garcia-Martinez V., Exposito-Romero G., Del Mar Frances M., Garcia-Sancho J., Gutierrez LM.(2014) The position of mitochondria and ER in relation to that of the secretory sites in chromaffin cells. *J. Cell Sci.* 127(23):5105-5114 [PubMed](#)

Año 2014

- Villar-Cerviño V., Fernandez-Lopez B., Celina Rodicio M., Anadon R.(2014) Aspartate-containing neurons of the brainstem and rostral spinal cord of the sea lamprey *Petromyzon marinus*: Distribution and comparison with γ -aminobutyric acid. *J. Comp. Neurol.* 522(6):1209-1231 [PubMed](#)
- Yildirim F., Ji SB., Kronenberg G., Barco A., Olivares R., Benito E., Dirnagl U., Gertz K., Endres M., Harms C., Meisel A.(2014) Histone Acetylation and CREB Binding Protein Are Required for Neuronal Resistance against Ischemic Injury. *PLoS ONE* 9(4):e-95465 [PubMed](#)
- Zoppi S., Madrigal JL., Caso JR., Garcia-Gutierrez MS., Manzanares J., Leza JC., Garcia-Bueno B.(2014) Regulatory role of the cannabinoid CB2 receptor in stress- induced neuroinflammation in mice. *Br. J. Pharmacol* 171(11):2814-2826 [PubMed](#)