



Publicaciones 2012-2014

**Crosstalk between PI(4,5)P(2) and CK2 modulates actin polymerization during endocytic uptake.**

Fernandez-Golbano IM, Idrissi FZ, Giblin JP, Grosshans BL, Robles V, Grotsch H, Borrás Mdel M, Geli MI. *Dev Cell*. 2014 Sep 29;30(6):746-58.

**KIS, a kinase associated with microtubule regulators, enhances translation of AMPA receptors and stimulates dendritic spine remodeling.**

Pedraza N, Ortiz R, Cornado A, Llobet A, Aldea M, Gallego C. *J Neurosci*. 2014 Oct 15;34(42):13988-97.

**Regulation of CBP and Tip60 coordinates histone acetylation at local and global levels during Ras-induced transformation.**

Sanchez-Molina S, Estaras C, Oliva JL, Akizu N, Asensio-Juan E, Rojas JM, Martínez-Balbas MA. *Carcinogenesis*. 2014 Oct;35(10):2194-202.

**A new non-canonical pathway of Galpha(q) protein regulating mitochondrial dynamics and bioenergetics.**

Beninca C, Planaguma J, de Freitas Shuck A, Acin-Perez R, Muñoz JP, de Almeida MM, Brown JH, Murphy AN, Zorzano A, Enriquez JA, Aragay AM. *Cell Signal*. 2014 May;26(5):1135-46.

**Sustained Wnt/beta-catenin signalling causes neuroepithelial aberrations through the accumulation of aPKC at the apical pole.**

Herrera A, Saade M, Menendez A, Martí E, Pons S. *Nat Commun*. 2014 Jun 19;5:4168.

**Live imaging in Drosophila: The optical and genetic toolkits.**

Rebollo E, Karkali K, Mangione F, Martín-Blanco E. *Methods*. 2014 Jun 15;68(1):48-59.

**DYRK1A promotes dopaminergic neuron survival in the developing brain and in a mouse model of Parkinson's disease.**

Barallobre MJ, Perier C, Bove J, Laguna A, Delabar JM, Vila M, Arbones ML. *Cell Death Dis*. 2014 Jun 12;5:e1289.

**An increase in MECP2 dosage impairs neural tube formation.**

Petazzi P, Akizu N, García A, Estaras C, Martínez de Paz A, Rodríguez-Paredes M, Martínez-Balbas MA, Huertas D, Esteller M. *Neurobiol Dis*. 2014 Jul;67:49-56.

**A Whi7-anchored loop controls the G1 Cdk-cyclin complex at start.**

Yahya G, Parisi E, Flores A, Gallego C, Aldea M. *Mol Cell*. 2014 Jan 09;53(1):115-26.

**The strength of SMAD1/5 activity determines the mode of stem cell division in the developing spinal cord.**

Le Dreau G, Saade M, Gutierrez-Vallejo I, Martí E. *J Cell Biol*. 2014 Feb 17;204(4):591-605.

**Fascin links Btl/FGFR signalling to the actin cytoskeleton during Drosophila tracheal morphogenesis.**

Okenve-Ramos P, Llimargas M. *Development*. 2014 Feb;141(4):929-39.

**Identification of a Putative Transcriptome Signature Common to Neuroblastoma and Neural Crest Cells.**

Angeles Rabadan M, Usieto S, Lavarino C and Martí E. *Dev Neurobiol* 73(11):815-27, Nov 2013

**KATP Channel Opener Diazoxide Prevents Neurodegeneration: A New Mechanism of Action via Antioxidative Pathway Activation**

Virgili N, Mancera P, Wappenhans P, Sorrosal G, Biber K, Pugliese M and Espinosa-Parrilla JF. *PLoS One* 8(9): e75189, Sep 2013

Publicaciones 2012-2014

**Bioactive membranes for bone regeneration applications: Effect of physical and biomolecular signals on mesenchymal stem cell behavior.** Tejada-Montes E, Smith KH, **Rebollo E**, Gómez R, Alonso M, Rodríguez-Cabello JC, Engel E, Mata A. *Acta Biomater Sep 2013 [Epub ahead of print]*

**Sonic hedgehog signaling switches the mode of division in the developing nervous system.** Saade M, Gutierrez-Vallejo I, Le Dréau G, Rabadán MA, Miguez DG, Buceta J and Martí E. *Cell Reports 4(3): 492-503, Aug 2013*

**Enhanced Cell-Material Interactions through the Biofunctionalization of Polymeric Surfaces with Engineered Peptides** Punet X, Mauchauffe R, Giannotti MI, Rodríguez-Cabello JC, Sanz F, Engel E, Mateos-Timoneda MA and Planell JA. *Biomacromolecules 14(8): 2690-2702, Aug 2013*

**Hierarchically engineered fibrous scaffolds for bone regeneration.** Sachot N, Castano O, Mateos-Timoneda MA, Engel E and Planell JA. *Journal of the Royal Society 10(88): 20130684, Aug 2013*

**Temporal control of BMP signalling determines neuronal subtype identity in the dorsal neural tube.** Tozer S, Le Dréau G, Martí E and Briscoe J. *Development 140(7): 1467-74, Apr 2013*

**Modular polylactic acid microparticle-based scaffolds prepared via microfluidic emulsion/solvent displacement process: Fabrication, characterization, and in vitro mesenchymal stem cells interaction study** Salerno A, Levato R, Mateos-Timoneda MA, Engel E, Netti PA and Planell JA. *Journal Biomed Mater Res A 101A(3): 720-732, Mar 2013*

**LMO4 is an essential cofactor in the Snail2-mediated epithelial-to-mesenchymal transition of neuroblastoma and neural crest cells.** Ferronha T, Rabadán MA, Gil-Guiñón E, LeDreau G, deTorres C and Martí E. *Journal of Neuroscience 33(7): 2794-2806, Feb 2013*

**Dorsal-Ventral Patterning of the Neural Tube: A tale of three signals.** Le Dreau G and Martí E. *Dev Neurobiol 72(12): 1471-81, Dec 2012*

**Control of microenvironmental cues with a smart biomaterial composite promotes endothelial progenitor cell angiogenesis.** Aguirre A, Gonzalez A, Navarro M, Castano O, Planell JA and Engel E. *Eur Cell Mater 24: 90-106, Dec 2012*

**Nucleolar exit of RNF8 and BRCA1 in response to DNA damage.** Guerra-Rebollo M, Mateo F, Franke K, Huen MSY, Lopitz-Otsoa F, Rodríguez MS, Plans V, Thomson TM. *Exp Cell Res 318(18): 2365-76, Nov 2012*

**Genome-wide analysis reveals that Smad3 and JMJD3 HDM co-activate the neural developmental program.** Estarás C, Akizu N, García MA, de la Cruz X and Martínez-Balbás MA. *Development 139: 2681-2691, Aug 2012*

**The critical size is set at a single-cell level by growth rate to attain homeostasis and adaptation.** Ferrezuelo F, Colomina N, Palmisano A, Garí E, Gallego C, Csikász-Nagy A, Aldea M. *Nat Commun 3: 1012, Jul 2012*

**Disease-specific phenotypes in dopamine neurons from human iPS-based models of genetic and sporadic Parkinson's disease.** Sánchez-Danés A, Richaud-Patin Y, Carballo-Carbajal I, Jiménez-Delgado S, Caig C, Mora S, Di Guglielmo C, Ezquerro M, Patel B, Giralt A, Canals JM, Memo M, Alberch J, López-Barneo J,

Publicaciones 2012-2014

Vila M, Cuervo AM, Tolosa E, Consiglio A, Raya A. *EMBO Mol Med* 4(5): 380-95, May 2012

**Preparation of Biodegradable Polylactide Microparticles via a Biocompatible Procedure** Levato R, Mateos-Timoneda MA and Planell JA. *Macromolecular Biosciences* 12(4): 557-566, Apr 2012

**Epithelial-mesenchymal transition can suppress major attributes of epithelial tumor-initiating cells.** Celià-Terrassa T, Meca-Cortés O, Mateo F, Martínez de Paz A, Rubio N, Arnal-Estapé A, Ell BJ, Bermudo R, Díaz A, Guerra-Rebollo M, Lozano JJ, Estarás C, Ulloa C, Álvarez-Simón D, Milà J, Vilella R, Paciucci R, Martínez-Balbás M, García de Herreros A, Gomis RR, Kang Y, Blanco J, Fernández PL, Thomson TM. *J Clin Invest* 122(5): 1849-1868, Apr 2012

**Jagged2 controls the switch between motor neuron and oligodendrocyte generation in the spinal cord.** Rabadan MA, Cayuso J, Le Dreau G, Cruz C, Barzi M, Pons S, Briscoe J and Martí E. *Cell Death and Differentiation* 19(2): 209-19, Feb 2012

**Canonical BMP7 activity is required for the generation of discrete neuronal populations in the dorsal spinal cord.** Le Dréau G, Garcia-Campmany L, Rabadán MA, Ferronha T, Tozer S, Briscoe J and Martí E. *Development* 139(2): 259-68, Jan 2012.