Estrategias Neuroprotectoras en Enfermedades Neurodegenerativas

Publicaciones: **17** Factor Impacto: **122.259** Q1: **16**

Actividad de Investigación

Tesis doctorales

Pajares Cabetas M. Transcription factor NRF2 regulates de expression of autophagy genes[dissertation]. Madrid: Universidad Autónoma de Madrid: 2018(19/10/2018).
Director: Cuadrado Pastor A.

Rubio Caballero C. Changes in gut microbiota associated to inflammation during ageing ans non-alcoholic steatohepatitis[dissertation]. Madrid: Universidad Autónoma de Madrid: 2018(14/12/2018).
Director: Martínez Valverde A.

Villar Lorenzo A. Papel del sustrato del receptor de la insulina 2 en la susceptibilidad al daño colestático en el hígado[dissertation]. Madrid: Universidad Autónoma de Madrid: 2018(25/10/2018).
Director: Martínez Valverde A.

Publicaciones

- Alcalde-Estévez E, Arroba AI, Sánchez-Fernández EM, Mellet CO, Fernández JMG, Masgrau L, Valverde AM. The sp(2)-iminosugar glycolipid 1-dodecylsulfony1-5N,6O-oxomethylidenenojirimycin (DSO2-ONJ) as selective anti-inflammatory agent by modulation of hemeoxygenase-1 in Bv.2 microglial cells and retinal explants. Food Chem Toxicol. 2018; 111: 454-66. Article. IF: 3.775; Q1
- Arroba AI, Campos-Caro A, Aguilar-Diosdado M, Valverde AM. IGF-1, Inflammation and retinal degeneration: A close network. Front Aging Neurosci. 2018; 10: 203. Review. IF: 3.633; Q2
- Cruces-Sande M, Vila-Bedmar R, Arcones AC, González-Rodríguez A, Rada P, Gutiérrez-de-Juan V, Vargas-Castrillón J, Iruzubieta P, Sánchez-González C, Formentini L, Crespo J, García-Monzón C, Martínez-Chantar ML, Valverde AM, Mayor F, Murga C. Involvement of G protein-coupled receptor kinase 2 (GRK2) in the development of non-alcoholic steatosis and steatohepatitis in mice and humans. BBA-Mol Basis Dis. 2018; 1864(12): 3655-67. Article. IF: 4.328; Q1
- Cuadrado A, Kugler S, Lastres-Becker I. Pharmacological targeting of GSK-3 and NRF2 provides neuroprotection in a preclinical model of tauopathy. Redox Biol. 2018; 14: 522-34. Article. IF: 7.793; D1
- Cuadrado A, Manda G, Hassan A, Alcaraz MJ, Barbas C, Daiber A, Ghezzi P, León R, Lopéz MG, Oliva B, Pajares M, Rojo AI, Robledinos-Antón N, Valverde AM, Guney E, Schmidt HHHW. Transcription factor NRF2 as a therapeutic target for chronic diseases: A systems medicine approach. Pharmacol Rev. 2018; 70(2): 348-83. Review. IF: 18.84; D1

- Elliott C, Rojo AI, Ribe E, Broadstock M, Xia WM, Morin P, Semenov M, Baillie G, Cuadrado A, Al-Shawi R, Ballard CG, Simons P, Killick R. A role for APP in Wnt signalling links synapse loss with beta-amyloid production. Transl Psychiat. 2018; 8: 179. Article. IF: 5.182; Q1.
- Ghezzi P, Floridi L, Boraschi D, Cuadrado A, Manda G, Levic S, D'Acquisto F, Hamilton A, Athersuch TJ, Selley L. Oxidative stress and inflammation induced by environmental and psychological stressors: A biomarker perspective. Antioxid Redox Sign. 2018; 28(9): 852-72. Review. IF: 5.828; Q1
- González-Rodríguez A, Valdecantos MP, Rada P, Addante A, Barahona I, Rey E, Pardo V, Ruiz L, Laiglesia LM, Moreno-Aliaga MJ, García-Monzón C, Sánchez A, Valverde AM. Dual role of protein tyrosine phosphatase 1B in the progression and reversion of non-alcoholic steatohepatitis. Mol Metab. 2018; 7: 132-46. Article. IF: 6.181; Q1
- Mojena M, Pimentel-Santillana M, Povo-Retana A, Fernández-García V, González-Ramos S, Rada P, Tejedor A, Rico D, Martín-Sanz P, Valverde AM, Boscá L. Protection against gamma-radiation injury by protein tyrosine phosphatase 1B. Redox Biol. 2018; 17: 213-23. Article. IF: 7.793; D1
- Pajares M, Cuadrado A, Engedal N, Jirsova Z, Cahova M. The role of free radicals in autophagy regulation: Implications for ageing. Oxid Med Cell Longev. 2018: 2450748. Review. IF: 4.868; Q1
- Pajares M, Rojo AI, Arias E, Díaz-Carretero A, Cuervo AM, Cuadrado A. Transcription factor NFE2L2/NRF2 modulates chaperone-mediated autophagy through the regulation of LAMP2A. Autophagy. 2018; 14(8): 1310-22. Article. IF: 11.059; D1
- Rada P, Pardo V, Mobasher MA, Martínez IG, Ruiz L, González-Rodríguez A, Sánchez-Ramos C, Muntane J, Alemany S, James LP, Simpson KJ, Monsalve M, Valdecantos MP, Valverde AM. SIRT1 controls acetaminophen hepatotoxicity by modulating inflammation and oxidative stress. Antioxid Redox Sign. 2018; 28(13): 1187-208. Article. IF: 5.828; Q1
- Rojo AI, Pajares M, García-Yagüe AJ, Buendía I, Van Leuven F, Yamamoto M, López MG, Cuadrado A. Deficiency in the transcription factor NRF2 worsens inflammatory parameters in a mouse model with combined tauopathy and amyloidopathy. Redox Biol. 2018; 18: 173-80. Article. IF: 7.793; D1
- Sellers KJ, Elliott C, Jackson J, Ghosh A, Ribe E, Rojo AI, Jarosz-Griffiths HH, Watson IA, Xia WM, Semenov M, Morin P, Hooper NM, Porter R, Preston J, Al-Shawi R, Baillie G, Lovestone S, Cuadrado A, Harte M, Simons P, Srivastava DP, Killick R. Amyloid beta synaptotoxicity is Wnt-PCP dependent and blocked by fasudil. Alzheimers Dement. 2018; 14(3): 306-17. Article. IF: 14.423; D1
- Valdecantos MP, Ruiz L, Pardo V, Castro-Sánchez L, García-Monzón C, Lanzón B, Rupérez J, Barbas C, Naylor J, Trevaskis JL, Grimsby J, Rondinone CM, Valverde AM. Differential effects of a glucagon-like peptide 1 receptor agonist in non-alcoholic fatty liver disease and in response to hepatectomy. SCI Rep-Uk. 2018; 8: 16461. Article. IF: 4.011; Q1
- Vázquez P, Hernández-Sánchez C, Escalona-Garrido C, Pereira L, Contreras C, López M, Balsinde J, de Pablo F, Valverde AM. Increased FGF21 in brown adipose tissue of tyrosine hydroxylase heterozygous mice: implications for cold adaptation. J Lipid Res. 2018; 59(12): 2308-20. Article. IF: 4.743; Q1
- Zarei M, Barroso E, Palomer X, Dai JL, Rada P, Quesada-López T, Escola-Gil JC, Cedo L, Zali MR, Molaei M, Dabiri R, Vázquez S, Pujol E, Valverde AM, Villarroya F, Liu Y, Wahli W, Vázquez-Camera M. Hepatic regulation of VLDL receptor by PPAR beta/delta and FGF21 modulates non-alcoholic fatty liver disease. Mol Metab. 2018; 8: 117-31. Article. IF: 6.181; Q1

Proyectos públicos

Cuadrado Pastor A. Papel de NRF2 en la función y el destino del cerebro con Alzheimer (SAF2016-76520-R). MICINN. 2017-2019.
Centro de gestión: UAM

Cuadrado Pastor A. Red de investigación de NRF2 como nodo del "patogenosoma" (SAF2015-71304-REDT). MICINN. 2015-2019.
Centro de gestión: UAM

Cuadrado Pastor A. Advanced theranostic approach in cancer combining photodynamic therapy and nanoparticles (PCIN-2016-071). MICINN/ M.ERANET. 2016-2019.
Centro de gestión: UAM

Martínez Valverde A. Inflammation associated with chronic metabolic damage in Type 2 diabetes and its complications. (SAF2015-65267R). MICINN. 2016-2018.
Centro de gestión: CISC

Martínez Valverde A. Identification of novel modulators of chronic inflammation in prevalent diseases: unveiling divergent mechanisms of disease. INFLAMES. (PIE14/00045). ISCIII. 2015-2018.
Centro de gestión: ISCIII

Martínez Valverde A. Mecanismos moleculares y comunicación intertisular en la resistencia a la insulina (B2017/BMD-3684 MOIR2-CM). CM. 2018-2020.
Centro de gestión: CISC

Proyectos privados

Martínez Valverde A. Experimental designs for studies on the role of G49 in dietinduced obesity (DIO) in mice and human cells: Impact on inflammation and mitochondria. Astrazeneca. 2018-2019.
Centro de gestión: CISC

Proyectos internacionales

Cuadrado Pastor A. Knowledge transfer in redox biology for developing advanced molecular tools in neurodegenerative diseases - focus on the signature of Nrf2 transcription factor in diagnosis and therapy (ID: P37_732). European Union. 2016-2020.
Centro de gestión: Victor Babes National Institute of Pathology. (Bucharest)

3.1 Área Neurociencias

Martínez Valverde A. TREATMENT - Training European Network: Metabolic Dysfunctions associated with Pharmacological Treatment of Schizophrenia. (GA721236). EU H2020. 2017-2020.

Centro de gestión: CISC

Patentes y Marcas

Cuadrado Pastor A, Innamorato NG, inventors: CSIC, UAM. Use of sulforaphane as supplementary therapy for early-stage neurodegenerative disease. P201231693; 2012 November 06.

León Martínez R, Egea Maíquez J, Buendía Abaitua I, Parada Pérez E, Navarro González de Mesa E, inventors; Fundación para la Investigación Biomédica del Hospital Universitario de La Princesa, UAM, CSIC, DNS NEUROSCIENCE S.A., assignees. Use of 3-(2-isothiocyanatoethyl)-5-methoxy-1H-indole for the treatment of neurodegenerative diseases. P201300667; 2013 July 17.

León Martínez R, Buendía Abaitua I, Navarro González de Mesa E, Michalska P, Gameiro Ros I, López Vivo A, Egea Maíquez J, García López M, García García A, inventors; Fundación para la Investigación Biomédica del Hospital Universitario de La Princesa, UAM, DNS NEUROSCIENCE S.A., assignees. Compounds derived from 3-alkylamine-1H-indolyl acrylate and its use for the treatment of neurodegenerative diseases. P201400810, PCT/ES2015/000139, CA2964309; 2014 October15.