

## Section A. PERSONAL DATA

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### A.1. Current professional situation

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Professional category	Investigador Contratado Miguel Servet	Start date	2015
UNESCO spec. code			
Keywords			

### A.2. Academic education (Degrees, institutions, dates)

Bachelor/Master/PhD	University	Year
Programa Oficial de Doctorado en Farmacología y Terapéutica	Universidad Autónoma de Madrid	2008
Licenciado en Bioquímica	Universidad de Murcia	2002

### Publications

- 1 Malek R; et al. New Dual Small Molecules for Alzheimer's Disease Therapy Combining Histamine H3 Receptor (H3R) Antagonism and Calcium Channels Blockade with Additional Cholinesterase Inhibition. J MED CHEM. 2019 Nov 14.
- 2 Capote-Moreno A; et al. Potential of Melatonin as Adjuvant Therapy of Oral Cancer in the Era of Epigenomics. CANCERS (Basel). 2019 Nov 2; 11(11).
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- 5 Guerrero-Hue M; et al. 2019. Curcumin reduces renal damage associated with rhabdomyolysis by decreasing ferroptosis-mediated cell death FASEB J. 33-8, pp.8961-8975.
- 6 Parada E; et al. 2019. Early TLR4 blockade reduces ROS and inflammation triggered by microglial pro-inflammatory phenotype in rodents and human brain ischemia models BRIT J PHARMACOL. 176-15, pp.2764-2779.
- 7 Casas AI; et al. 2019. From single drug targets to synergistic network pharmacology in ischemic stroke P NATL ACAD SCI USA. 2019 Apr 2;116(14):7129-7136.
- 8 Gil-Martín E; et al. 2019. The emergence of melatonin in oncology: Focus on colorectal cancer MED RES REV. 2019 Nov;39(6):2239-2285.
- 9 Rubio-Navarro A; et al. 2019. Nrf2 Plays a Protective Role Against Intravascular Hemolysis-Mediated Acute Kidney Injury FRONT PHARMACOL. 2019 Jul 3;10:740.
- 10 Ramos E; et al. 2019. QuinoxalineTacrine QT78, a Cholinesterase Inhibitor as a Potential Ligand for Alzheimer's Disease Therapy MOLECULES. 24-8.
- 11 Carabias CS; et al. 2019. Serum Amyloid A1 as a potential intracranial and extracranial clinical severity biomarker in traumatic brain injury J INTENSIVE CARE MED. 2019 Apr 8:885066619837913.

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- 14 Arribas, R.L.; et al. (4/3). 2018. Modulation of serine/threonine phosphatases by melatonin: therapeutic approaches in neurodegenerative diseases BRIT J PHARMACOL. 175-16, pp.3220-3229.
- 15 Rubio-Navarro, A.; et al. (19/9). 2018. Podocytes are new cellular targets of haemoglobin-mediated renal damage J PATHOL. 244-3, pp.296-310.
- 16 Rieger, D.K.; et al. (13/12). 2017. ConBr, A Lectin Purified from the Seeds of *Canavalia brasiliensis*, Protects Against Ischemia in Organotypic Culture of Rat Hippocampus: Potential Implication of Voltage-Gated Calcium Channels NEUROCHEM RES. 42-2, pp.347-359.
- 17 Monjas, L.; et al. (10/4). 2017. Enzymatic and solid-phase synthesis of new donepezil-based L- and D-glutamic acid derivatives and their pharmacological evaluation in models related to Alzheimer's disease and cerebral ischemia EUR J MED CHEM. 130, pp.60-72.
- 18 Egea, J.; et al. 2017. European contribution to the study of ROS: A summary of the findings and prospects for the future from the COST action BM1203 (EU-ROS) REDOX BIOL. 13, pp.94-162.
- 19 Ramos, E.; et al. 2017. Ischemic brain injury: New insights on the protective role of melatonin FREE RADICAL BIO MED. 104, pp.32-53.
- 20 Ramos, E.; et al. 2017. Melatonin as a versatile molecule to design novel multitarget hybrids against neurodegeneration FUTURE MED CHEM. 9-8, pp.765-780.
- 21 Hernansanz-Agustín, P.; et al. 2017. Mitochondrial complex I deactivation is related to superoxide production in acute hypoxia REDOX BIOL. 12, pp.1040-1051.
- 22 Bautista-Aguilera, Ó.M.; et al. 2017. Multitarget-Directed Ligands Combining Cholinesterase and Monoamine Oxidase Inhibition with Histamine H3R Antagonism for Neurodegenerative Diseases ANGEW CHEM INT EDIT. 56-41, pp.12765-12769.
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- 26 Freitas, A.E.; et al. 2016. Agmatine, by Improving Neuroplasticity Markers and Inducing Nrf2, Prevents Corticosterone-Induced Depressive-Like Behavior in Mice MOL NEUROBIOL. 53-5, pp.3030-3045.
- 27 Patiño, P.; et al. 2016. Melatonin protects against oxygen and glucose deprivation by decreasing extracellular glutamate and Nox-derived ROS in rat hippocampal slices NEUROTOXICOLOGY. 57, pp.61-68.
- 28 Zha, X.; et al. 2016. Novel Tacrine-Benzofuran Hybrids as Potent Multitarget-Directed Ligands for the Treatment of Alzheimer's Disease: Design, Synthesis, Biological Evaluation, and X-ray Crystallography J MED CHEM. 59-1, pp.114-131.
- 29 Buendia, I.; et al. 2016. Nrf2-ARE pathway: An emerging target against oxidative stress and neuroinflammation in neurodegenerative diseases PHARMACOL THERAPEUT. 157, pp.84-104.
- 30 De Pascual, R.; et al. 2016. Regulation by L channels of Ca<sup>2+</sup>-evoked secretory responses in ouabain-treated chromaffin cells PFLUG ARCH EUR J PHY. 468-10, pp.1779-1792.
- 31 Fernández-Montoya, J.; et al. 2016. Sensory input-dependent changes in glutamatergic neurotransmission-related genes and proteins in the adult rat trigeminal ganglion FRONT MOL NEUROSCI. 9-NOV2016.
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- 34 Freitas, A.E.; et al. 2015. Agmatine Induces Nrf2 and Protects Against Corticosterone Effects in Hippocampal Neuronal Cell Line *MOL NEUROBIOL.* 51-3, pp.1504-1519.
- 35 Navarro, E.; et al. 2015. Alpha7 nicotinic receptor activation protects against oxidative stress via heme-oxygenase 1 induction *BIOCHEM PHARMACOL.* 97-4, pp.473-481.
- 36 Egea, J.; et al. 2015. Anti-inflammatory role of microglial alpha7 nAChRs and its role in neuroprotection *BIOCHEM PHARMACOL.* 97-4, pp.463-472.
- 37 Egea, J.; et al. 2015. Melatonin-sulforaphane hybrid ITH12674 induces neuroprotection in oxidative stress conditions by a 'drug-prodrug' mechanism of action *BRIT J PHARMACOL.* 172-7, pp.1807-1821.
- 38 Parada, E.; et al. 2015. Microglial HO-1 induction by curcumin provides antioxidant, antineuroinflammatory, and glioprotective effects *MOL NUTR FOOD RES.* 59-9, pp.1690-1700.
- 39 Buendia, I.; et al. 2015. Neuroprotective mechanism of the novel melatonin derivative Neu-P11 in brain ischemia related models *NEUROPHARMACOLOGY.* 99, pp.187-195.
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- 52 **Scientific paper.** Cunha, M.P.; et al. 2013. Protective effect of creatine against 6-hydroxydopamine-induced cell death in human neuroblastoma SH-SY5Y cells: Involvement of intracellular signaling pathways *Neuroscience.* 238, pp.185-194.

## Patents

- 1 Josep Vergés Milano; Laia Montell Buenaventura; Ramón Ruhí Roura; Carlos Raúl Aláez Versón; Antonio García García; Manuela García López; Juan Fernando Padín Nogueira; Marcos Maroto Pérez; Javier Egea Máiquez. ES2684097A1. Disacáridos sulfatados para el

- tratamiento del dolor neuropático Spain. 01/10/2018. Bioibérica, S.A.. Bioibérica, S.A.
- 2 Rafael Leon; Izaskun Buendia; Elisa Navarro; Patricia Michalska; Isabel Gameiro; Alicia Lopez Vivo; Javier Egea Máiquez; Manuela Garcia Lopez; Antonio Garcia Garcia. ES2570452B1. Compuestos derivados de Acrilato de 3-alkiloamino-1H-indolilo y su uso en el tratamiento de enfermedades neurodegenerativas Spain. 19/04/2017. Fundación de investigación Hospital universitario la Princesa.
  - 3 Rafael Leon; Javier Egea; Izaskun Buendia; Esther Parada; Elisa Navarro. ES2526979B1. Uso del 3-(2-isotiocianatoetil)-5-metoxi-1H-indol para el tratamiento de enfermedades neurodegenerativas Spain. 28/10/2015. FIB La Princesa/ UAM/ CSIC.
  - 4 Vergés J; García AG; Ruhí R; Montell E; López MG; Aláez C; Escaich J; Egea J.ES2364683B1. Disacáridos sulfatados para el tratamiento de las enfermedades neurodegenerativas y/o neurovasculares Spain. 08/08/2012. Universidad Autónoma de Madrid y Laboratorios Bioibérica.
  - 5 Cristóbal de los Ríos; Alejandro Romero; Javier Egea; Rafael León; Mercedes Villarroya; Manuela García; Antonio García; José Luis Marco; Elena Soriano; Abdelouahid Samadi; Mourad Chioua.WO2011051527A1. Compuestos derivados de 1,8-naftiridinas y su uso en el tratamiento de enfermedades neurodegenerativas. Spain. 05/05/2011. UAM/CSIC.
  - 6 Patricia Marañón; Paloma Narros; Esther Rey; Carmelo García Monzón; Javier Egea; Águeda González Rodríguez. Solicitud IET. Uso de las proteínas morfogenéticas óseas como biomarcadores para la detección temprana, el diagnóstico y la caracterización de lesiones hepáticas Spain. FUNDACION PARA LA INVESTIGACION BIOMEDICA DEL HOSPITAL UNIVERSITARIO "LA PRINCESA".
  - 7 Paloma Narros; Patricia Marañón; Victor Farré; Alejandra Palomino; Cristobal de los Ríos; Águeda González Rodríguez; Javier Egea. Solicitud IET. Uso de nuevos bloqueantes del intercambiador Na<sup>+</sup>/Ca<sup>2+</sup> mitocondrial con actividad anti-inflamatoria Spain. FUNDACION PARA LA INVESTIGACION BIOMEDICA DEL HOSPITAL UNIVERSITARIO "LA PRINCESA".