MINISTERIO DE CIENCIA E INNOVACIÓN

Cofinanciado por la Unión Europea

AGENCIA ESTATAL DE INVESTIGACIÓN

CURRICULUM VITAE (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

CV date	15 Nov, 2022

Part A. PERSONAL INFORMATION

First name	ROCÍO		
Family name	MARTÍNEZ DE PABLOS		

(*) Mandatory

A.1. Current position

Position	Catedrática de Universidad (Full Professor)		
Initial date	2022		
Institution	University of Seville		
Department/Center	Biochemistry and Molecular Biology		
Country	Spain	Teleph. number	
Key words	Microglía, Neuroinflammation, Neurodegenerative diseases		

A.2. Previous positions (research activity interuptions, art. 14.2.b))

Period	Position/Institution/Country/Interruption cause
2019-2022	Profesor Titular (Lecturer)/Universidad de Sevilla
2012 - 2019	Profesor Contratado Doctor / Universidad de Sevilla
2008 - 2012	Profesor Ayudante Doctor / Universidad de Sevilla
2006 - 2008	Profesor Ayudante / Universidad de Sevilla

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Degree in Biochemistry	University of Sevilla / Spain	2017
PhD. in Pharmacy	University of Sevilla / Spain	2005
Degree in Pharmacy	University of Sevilla / Spain	2000

Part B. CV SUMMARY *(max. 5000 characters, including spaces)*

I have degrees in Pharmacy and Biochemistry and I am a Doctor from the University of Seville. My PhD studies focused on demonstrating the involvement of endogenous dopamine in Parkinson's disease. The studies on dopamine led me to a second line of research focused on the damaging effects of stress on different brain structures. These studies have resulted in various articles published in prestigious international journals. Part of these works have also been the object of obtaining three research awards with which their scientific relevance is recognized. I am currently pursuing my research work on these two topics along with new studies on the effects of peripheral inflammation on the brain. In addition to these three main topics, I have collaborated in various research works in my laboratory and in other national and international laboratories focused especially on inflammatory processes. These

collaborations have meant a total of 50 publications in international magazines, more than 40 congresses, several of them with scholarships awarded by different associations and 3 book chapters. In the last 10 years I have signed as the last author or corresponding author most of my scientific publications These productions made me have 3 sexenios, 1780 cites and a H index of 22. On the other hand, in these years of research work I have participated in 12 research projects and 10 complementary grants. I have been Principal Investigator of 6 projects granted by the Ministry of Economy and Competitiveness, the Junta de Andalucía, the University of Sevilla and the Koplowitz Foundation and I have been a tutor of an emerging project. I have directed 6 doctoral theses and 12 TFM. On the other hand, I have made a stay at the Severo Ochoa Molecular Biology Center in Madrid. Likewise, I have made a stay at the Gray Institute for Radiation Oncology and Biology at the University of Oxford (United Kingdom) and another at the Wallenberg Neuroscience Center at the University of Lund (Sweden), one of the most recognized neuroscience centers in the world. I belong to various groups and associations related to my research work and I regularly participate as an article reviewer for various international journals. I also serve on the editorial board of the Asian Journal of Neuroscience and the Journal of Citology and Molecular Biology. Likewise, I am an Associate Editor of the journal Frontiers in Cellular Neurosciences. From the teaching point of view, I have been teaching classes in different degrees since 2001, both in first and second cycle subjects, as well as in masters and doctorates. I regularly participate and coordinate teaching innovation projects and have organized scientific dissemination courses and conferences for years. Finally, I am the author of various teaching materials and contributions to teaching conferences

Part C. RELEVANT MERITS *(sorted by typology)*

C.1. Publications *(see instructions)*

1 Scientific paper. Ana M Espinosa-Oliva, Pablo García-Miranda, Isabel María Alonso-Bellido, Ana E Carvajal, Melania González-Rodríguez, Alejandro Carrillo-Jiménez, Arturo J Temblador, Manuel Felices-Navarro, Irene García-Domínguez, María Angustias Roca-Ceballos, María D Vázquez-Carretero, Juan García-Revilla, Marti Santiago, María J Peral, José Luis Venero, Rocío M de Pablos (16/16). 2021. Galectin-3 deletion reduces LPS and acute colitis-induced pro-inflammatory microglial activation in the ventral mesencephalon. Frontiers in Pharmacology. IF: 5.81. FRONTIERS MEDIA SA. 12. ISSN 1663-9812. WOS (0), SCOPUS (1) https://doi.org/10.3389/fphar.2021.706439. **Last author of this multidisciplinary Q1 paper in collaboration with several research groups in which the immunomodulatory roles of Galectin-3 in the brain are tested in two different models of peripheral inflammation.**

2 Scientific paper. Irene García-Domínguez, Irene Suárez-Pereira, Marti Santiago, Eva M Pérez-Villegas, Lidia Bravo, Carolina López-Martín, María Angustias Roca-Ceballos, Juan García-Revilla, Ana M Espinosa-Oliva, José A Rodríguez-Gómez, Bertrand Joseph, Esther Berrocoso, José Ángel Armengol, José L Venero, Rocío Ruiz, Rocío M de Pablos (16/16). 2021. Selective deletion of Caspase-3 gene in the dopaminergic system exhibits autistic-like behaviour. Progress In Neuro-Psychopharmacology & Biological Psychiatry. IF: 5.067. PERGAMON-ELSEVIER SCIENCE LTD. 104. ISSN 1878-4216. WOS (2), SCOPUS (2) https://doi.org/10.1016/j.pnpbp.2020.110030. **Last author of a collaborative Q1 paper that involves researchers from different centers including both national and international**. **The paper deal with the involvement of the dopaminergic system in the autism spectrum disorder.**

3 Scientific paper. Daniel J García-Domínguez, Nabil Hajji, Sara Sánchez-Molina, Elisabet Figuerola-Bou, Rocío M de Pablos, Ana M Espinosa-Oliva, Eduardo Andrés-León, Laura Carmen Terrón-Camero, Rocío Flores-Campos, Guillem Pascual-Pasto, María José Robles, Isidro Machado, Antonio Llombart-Bosch, Giovanna Magagnoli, Katia Scotlandi, Ángel M Carcaboso, Jaume Mora, Enrique de Álava, Lourdes Hontecillas-Prieto. (5/19). 2021. Selective inhibition of HDAC6 regulates expression of the oncogenic driver EWSR1-FLI1 through the EWSR1 promoter in Ewing sarcoma. Oncogene. IF: 9.867. NATURE PUBLISHING GROUP. 40-39, pp.5843-5853. ISSN 0950-9232. WOS (0), SCOPUS (0) https://doi.org/10.1038/s41388-021-01974-4. **Multidisciplinary collaboration with an international consortium. The paper was published in Oncogene (Q1), belonging to the Nature publishing group.**

4 Scientific paper. Marta Gallardo-Fernández, Ruth Hornedo-Orteg, Isabel M Alonso-Bellido, José A Rodríguez-Gómez, Ana M Troncoso, M Carmen García-Parrilla, José L Venero, Ana M Espinosa-Oliva, Rocío M de Pablos (9/9). 2020. Hydroxytyrosol decreases LPS-and α-synuclein-induced microglial activation in vitro. Antioxidants. IF:6.312. MDPI;MDPI AG. 9-1. ISSN 2076-3921. WOS (5), SCOPUS (9) https://doi.org/10.3390/antiox9010036. **Last author of this multidisciplinary paper in collaboration with the department of Nutrition and Bromatology, Toxicology and Legal Medicine of the University of Sevilla. The paper study the anti-inflammatory and neuroprotective effects of a polyphenol abundant in olive oil and was published in a journal in the D1 ranking.**

5 Bibliographic review. de Pablos, Rocío M.; Espinosa-Oliva, Ana María; Hornedo-Ortega, Ruth; Cano, Mercedes; Arguelles, Sandro. (1/5). 2019. Hydroxytyrosol protects from aging process via AMPK and autophagy; a review of its effects on cancer, metabolic syndrome, osteoporosis, immune-mediated and neurodegenerative diseases. Pharmacological Research. IF: 7,658. ACADEMIC PRESS LTD-ELSEVIER SCIENCE LTD. 143, pp.58-72. ISSN 1043-6618. WOS (40), SCOPUS (40) https://doi.org/10.1016/j.phrs.2019.03.005. **First author of this Q1 review that has had a very good acceptance.**

6 Bibliographic review. Cayero-Otero, María Dolores; Espinosa-Oliva, Ana M.; Herrera, Antonio J.; García-Domínguez, Irene; Fernández-Arévalo, Mercedes; Martín-Banderas, Lucía; de Pablos, Rocío M. (7/7). 2018. Potential Use of Nanomedicine for the Anti-inflammatory Treatment of Neurodegenerative Diseases. Current Pharmaceutical Design. IF: 3,116. BENTHAM SCIENCE PUBL LTD. 24-14, pp.1589-1616. ISSN 1381-6128. WOS (7), SCOPUS (7) https://doi.org/10.2174/1381612824666180403113015. **Last author of a multidisciplinary review in collaboration with the department of Pharmaceutical Technology of the University of Sevilla.**

7 Scientific paper. Khadija Tayara, Ana M Espinosa-Oliva, Irene García-Domínguez, Afrah Abdul Ismaiel, Antonio Boza-Serrano, Tomas Deierborg, Alberto Machado, Antonio J Herrera, José L Venero, Rocío M. de Pablos (10/10) 2018. Divergent Effects of Metformin on an Inflammatory Model of Parkinson's Disease. Frontiers in Cellular Neurosciences. IF: 5.5. WOS (13), SCOPUS (12) doi: 10.3389/fncel.2. **Last author of this multidisciplinary Q1 paper in collaboration with an international research group belonging to the Lund University.**

8 Scientific paper. Afrah A K Ismaiel, Ana M Espinosa-Oliva, Martiniano Santiago, Albert García-Quintanilla, María J Oliva-Martín, Antonio J Herrera, José L Venero, Rocío M de Pablos. (8/8) 2016. Metformin, besides exhibiting strong in vivo anti-inflammatory properties, increases MPTP-induced damage to the nigrostriatal dopaminergic system. Toxicology and Applied Pharmacology. IF: 4,219. WOS (33), SCOPUS (33) 1-219, pp.19-30. **Last and corresponding author of this paper regarding the properties of metformin in the ventral mesencephalon and its implication in Parkinson´s disease development.**

9 Scientific paper. Rocío M. de Pablos; Antonio José Herrera Carmona; Ana María Espinosa Oliva; Manuel Sarmiento Soto; Mario Muñoz Pinto; Alberto Machado de la Quintana; José Luis Venero Recio. (1/7). 2014. Chronic stress enhances microglia activation and exacerbates death of nigral dopaminergic neurons under conditions of inflammation. Journal of Neuroinflammation. IF: 8,322. Biomed Central. 24, pp.11-34. ISSN 1742-2094. WOS (96), SCOPUS (102) https://doi.org/10.1186/1742-2094-11-34. **First author of this Q1 paper dealing with the stress effects on the nigral dopaminergic system and its involvement in Parkinson´s disease development.**

10 Scientific paper. Espinosa-Oliva, Ana Maria; Martinez-De Pablos, Rocio; Villaran-Fernandez,Ruth; Argüelles-Castilla, Sandro; Venero-Recio, Jose Luis; Machado-De La Quintana, Alberto; Cano-Garcia, Josefina (AC). (2/7). 2011. Stress is critical for LPS-induced activation of microglia and damage in the rat hippocampus. Neurobiology of aging. IF: 6,189. ELSEVIER. 32-1, pp.85-102. ISSN 0197-4580. WOS (102), SCOPUS (103) https://doi.org/10.1016/J.NEUROBIOLAGING.2009.01.012. **Corresponding**

author of this Q1 paper dealing with the stress effects on the limbic system and its involvement in Alzheimer´s disease development.

C.3. Research projects

1 Project. Implicación del sistema inmune cerebral en el desarrollo del trastorno del espectro autista. Principal investigator. Fundación Alicia Koplowitz. 01/11/2022-01/11/2023. 28.000 €.

2 Project. PID2021-124096OB-100; Identificación de subpoblaciones microgliales deletéreas potencialmente relevantes en enfermedades neurodegenerativas (bADMIC). Principal investigator. Ministerio de Ciencia e Innovación.

3 Project. P18-RT-1372; Modulación de la activación microglial asociada a neurodegeneración, relevancia en enfermedades neurodegenativas. Principal investigator. Junta de Andalucía. 01/01/2020-31/12/2022. 140.352 €.

4 Project. US-1264806; Papel de la Galectina -3 en el Envejecimiento Cerebral. Principal investigator. Junta de Andalucía. 01/02/2020-31/01/2022. 70.000 €.

5 Project. RTI2018-098645-B-I00; Papel de la Galectina-3 en la Respuesta Inmune Asociada a Enfermedades del Sistema Nervioso Central. Implicación en Enfermedades Neurodegenerativas y Glioblastoma Multiforme. Principal investigator. Ministerio de Ciencia, Innovación y Universidades. 01/01/2019-31/12/2021. 193.600 €.

6 Project. US-1265062; Study of the caspase-3 dependent mechanisms governing microglial activation in Parkinson's disease. Tutor. Junta de Andalucía (Consejería de Economía y Conocimiento). 01/02/2020-30/04/2022. 30.000 €.

6 Project. SAF2015-64171-R; Funciones Apoptóticas y no Apoptóticas de las Caspasas Asesinas en el Sistema Nervioso Central en Condiciones Normales y Patológicas. Principal investigator. Ministerio de Economía y Competitividad. 01/01/2016- 31/12/2018. 275.880 €.

7 Project. US-1265062; Study of the caspase-3 dependent mechanisms governing microglial activation in Parkinson's disease. Tutor. Junta de Andalucía. 01/02/2020- 30/04/2022. 30.000,00 €.

8 Project. Estudio de los Mecanismos Moleculares que Regulan la Inflamación Cerebral y la Longevidad. Diseño de Estrategias Farmacológicas Encaminadas a Minimizar el Daño Neuronal Asociado a la Inflamación Cerebral en Modelos Animales de Enfermedades Neurodegenerativas. Team member. Junta de Andalucía - Consejería de Innovación, Ciencia y Empresas. 15/03/2011-30/04/2016. 294.652 €.

9 Project. P09-CTS-5244; Estudio de los Cambios que Experimentan con el Envejecimiento las Rutas que Promueven la Supervivencia Celular y la Inflamación Cerebral: Modulación de las Mismas para Conseguir un Envejecimiento Saludable y Minimizar la Neurodegeneración. Team member. Junta de Andalucía. 03/03/2011-03/03/2015. 65.000 €.

10 Project. BFU2010-20882; Significado biológico de la integración de los distintos mecanismos de regulación del factor de elongacion-2 en condiciones de estrés celular y envejecimiento. Team member. Ministerio de Ciencia e Innovación. 01/01/2011- 31/12/2013. 114.950 €.