

Date of the CVA	15/11/2018
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Section A. PERSONAL DATA

Name and Surname	Carmen Ramos Martin		
DNI		Age	43
Researcher's identification number	Researcher ID	G-6267-2012	
	Scopus Author ID		
	ORCID		

A.1. Current professional situation

Institution	FUNDACION MEDINA		
Dpt. / Centre			
Address			
Phone	Email	carmen.ramos@medinaandalucia.es	
Professional category	Principal Scientist	Start date	2016
UNESCO spec. code	249000 - Neurosciences		
Keywords	Molecular mechanism of disease; Cell culture; Cell biology; Molecular biology		

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

Bachelor/Master/PhD	University	Year
PhD, Biochemistry and Molecular Biology	Autonomous University of Madrid	2004
Pedagogical Adaptation Course (CAP)	Complutense University of Madrid	2004
BS, Biochemistry and Molecular Biology	Autonomous University of Madrid	1998

A.3. General quality indicators of scientific production

Total citations = 229; average citation per article= 22.9; h-index = 7

Section B. SUMMARY OF THE CURRICULUM

Currently, I am working in Fundación MEDINA, as Principal Scientist in Screening and Cell culture Area, where I am developing drug screening programs in the field of cancer [Ramos et al., 2017] and neuronal diseases, efficacy studies and target validation in vitro and in vivo.

Throughout my PhD period, in the Centre of Molecular Biology "Severo Ochoa" of the Autonomous University of Madrid, I received training about molecular genetic (PCR, RT-PCR, cloning, EMSA) and cell biology techniques (cell culture, established cell generation, primary cells isolation, western blot, ELISA, immunocytochemistry) [Bullido et al., 2004; Ramos et al., 2005]. Additionally, I gained experience in biological samples handling and in conducting case-control genetic studies [Bullido et al., 2000, Ramos et al., 2006]. The dissertation of my PhD was about Molecular Bases of Alzheimer's disease.

Thereafter, I started working in a biotech company, Neuron Bio (Granada), where I was in charge of the organization and establishment of the cell culture laboratory, implementing control and safety systems. The aim of this period was the discovery of neuroprotective, antioxidant and anti-inflammatory compounds through thousands of screening assays, as a result of which several patents have been generated. In the last five years as Senior Researcher in NeuronBio, I participated in three projects with public funding as principal researcher. In that years I acquired knowledge about computational approaches for drug discovery and development and about methodologies such as the generation of cell models of disease, high throughput techniques, real-time cell monitoring technology, flow cytometry, fluorescence microscopy and DNA arrays [Sierra et al., 2011; Ramos et al., 2012]. Moreover, I have used zebrafish as a research model [Alfaro et al., 2010].

Furthermore, I have experience in the implementation and management of R&D in compliance to UNE166002, in the research with experimental animals according to RD 53/2013, in Intellectual Property management and in the use of alternative models to experimental animals.

Section C. MOST RELEVANT MERITS (ordered by typology)

C.1. Publications

- 1 **Scientific paper.** Boulaiz H; et al. (6/2). 2017. What's new in the diagnosis of pancreatic cancer: a patent review (2011-present) Expert Opinion on Therapeutic Patents. Epub ahead of prin. ISSN 1744-7674.
- 2 **Scientific paper.** Ramos MC; et al. (5/1). 2017. What's new in treatment of pancreatic cancer: a patent review (2010-2017) Expert Opinion on Therapeutic Patents. Taylor & Francis Group. 27-11, pp.1251-1266. ISSN 1354-3776.
- 3 **Scientific paper.** Ramos, Maria C.; et al. (5/1). 2012. Simvastatin Modulates the Alzheimer's Disease-Related Gene seladin-1 Journal of Alzheimers Disease. 28-2, pp.297-301.
- 4 **Scientific paper.** Bonzon-Kulichenko, Elena; et al. (15/7). 2011. A Robust Method for Quantitative High-throughput Analysis of Proteomes by O-18 Labeling Molecular and Cellular Proteomics. 10-1, pp.1-14.
- 5 **Scientific paper.** Sierra, Saleta; et al. (6/2). 2011. Statins as Neuroprotectants: A Comparative In Vitro Study of Lipophilicity, Blood-Brain-Barrier Penetration, Lowering of Brain Cholesterol, and Decrease of Neuron Cell Death Journal of Alzheimers Disease. 23-2, pp.307-318.
- 6 **Scientific paper.** Alfaro, Juan M.; et al. (7/3). 2010. Biomedical Properties of a Series of Ruthenium-N-Heterocyclic Carbene Complexes Based on Oxidant Activity In Vitro and Assessment In Vivo of Biosafety in Zebrafish Embryos Zebrafish. 7-1, pp.13-21.
- 7 **Scientific paper.** Campoy, Sonia; et al. (7/4). 2010. Semisynthesis of novel monacolin J derivatives: hypocholesterolemic and neuroprotective activities Journal of Antibiotics. 63-8, pp.499-505.
- 8 **Scientific paper.** Recuero, Maria; et al. (11/4). 2009. A free radical-generating system induces the cholesterol biosynthesis pathway: a role in Alzheimer's disease Aging Cell. 8-2, pp.128-139.
- 9 **Scientific paper.** Ramos, Maria C.; et al. (9/1). 2006. Association of DSC1, a gene modulated by adrenergic stimulation, with Alzheimer's disease Neuroscience Letters. 408-3, pp.203-208.
- 10 **Scientific paper.** Ramos, M. C.; et al. (7/1). 2005. Neuronal specific regulatory elements in apolipoprotein E gene proximal promoter Neuroreport. 16-9, pp.1027-1030.
- 11 **Scientific paper.** Bullido, M. J.; et al. (10/1). 2004. Polymorphism in genes involved in adrenergic signaling associated with Alzheimer's Neurobiology of Aging. 25-7, pp.853-859.
- 12 **Scientific paper.** Bullido, M. J.; et al. (10/4). 2000. Alzheimer's risk associated with human apolipoprotein E, alpha-2 macroglobulin and lipoprotein receptor related protein polymorphisms: absence of genetic interactions, and modulation by gender Neuroscience Letters. 289-3, pp.213-216.
- 13 **Book chapter.** Ramos; et al. 2018. Drug Discovery from Natural Products for Pancreatic Cancer Advances in Pancreatic Cancer. IntechOpen.
- 14 **Review.** Lage; et al. 2018. Current Screening Methodologies in Drug Discovery for Selected Human Diseases Marine Drugs. 16-8.

C.2. Participation in R&D and Innovation projects

- 1 Smart olive oil nanocapsules for the oral administration of drugs against pancreatic stem cells Agencia Estatal de Investigación (RETOS, MINECO. Ref.: MAT2015-63644-C2-2-R). (Fundación MEDINA). 2016-2018.
- 2 TWINN, BLUEandGREEN, Boosting scientific excellence and innovation capacity in biorefineries based on marine resources. European Commission (H2020 Ref.: 692419). (Fundación MEDINA). 2016-2018.
- 3 Development of bioactive beverage for improving reproductive health in the adult population (REPROBEB15) Centro para el Desarrollo Tecnológico Industrial (CDTI, MINECO). (NEURON BIOPHARMA, S.A.). 2015-2016.
- 4 Preclinical evaluation of a new drug as protector Agencia de Innovación y Desarrollo de Andalucía (IDEA). (Neuron Bio). (NEURON BIOPHARMA, S.A.). 2014-2015.

- 5 Multidisciplinary Action on Rare Diseases and Personalized Medicine (AMER) Centro para el Desarrollo Tecnológico Industrial (CDTI, MINECO). 1. (NEURON BIOPHARMA, S.A.). 2013-2015.
- 6 Preclinical optimization and development of a new drug (XAN) Corporación Tecnológica de Andalucía (CTA). (Neuron Bio). (NEURON BIOPHARMA, S.A.). 2012-2015.
- 7 The Effect of Diet on the Mental Performance of Children (Nutrimenthe) European Commission (7th framework programme). (NEURON BIOPHARMA, S.A.). 2008-2013.
- 8 Desarrollo de extractos de plantas tropicales como antioxidantes y neuroprotectores Corporación Tecnológica de Andalucía (CTA). (NEURON BIOPHARMA, S.A.). 2011-2012.
- 9 Development of a diagnostic test for Alzheimer's disease and other dementias Corporación Tecnológica de Andalucía (CTA). (NEURON BIOPHARMA, S.A.). 2011-2012.
- 10 Desarrollo preclínico de un nuevo fármaco Centro para el Desarrollo Tecnológico Industrial (CDTI, MINECO)). (NEURON BIOPHARMA, S.A.). 2010-2012.
- 11 ANDALUCIA FOOD HEALTH: Developing solutions for food nutritional requirements (AL-ANDSALUD) Centro para el Desarrollo Tecnológico Industrial (CDTI, MINECO)). (NEURON BIOPHARMA, S.A.). 2009-2012.
- 12 Multidisciplinary Approach to Alzheimer's disease Ministerio de Industria. (NEURON BIOPHARMA, S.A.). 2008-2011.
- 13 Contract for Doctors and Technologists Torres Quevedo Program MINISTERIO DE EDUCACION Y CIENCIA. (NEURON BIOPHARMA, S.A.). 2008-2010.
- 14 Study of the most relevant scientific and technical parameters for the development of a platform for testing drugs and new molecules for the treatment of central nervous system disease or Alzheimer's Ministerio de Industria (PROFIT). (NEURON BIOPHARMA, S.A.). 2008-2009.
- 15 Collection and preclinical evaluation of statins and derivatives with neuroprotective and/or antihypercholesterolemic activity Centro para el Desarrollo Tecnológico Industrial (CDTI). (NEURON BIOPHARMA, S.A.). 2007-2009.
- 16 Discovery and pharmacological evaluation of statins and derivatives with neuroprotective activity Agencia de Innovación y Desarrollo de Andalucía (IDEA). (NEURON BIOPHARMA, S.A.). 2006-2008.
- 17 Studies on the role of herpesvirus type 1 (HSV-1) in neurodegenerative processes Ministerio de Ciencia y Tecnología (SAF2004-07656-C02-01). (Centro de Biología Molecular Severo Ochoa). 2004-2007.
- 18 Susceptibility genes for Alzheimer's disease Ministerio de Ciencia y Tecnología (MCYT, GEN2003-20235-C05-05). (Centro de Biología Molecular Severo Ochoa). 2004-2007.
- 19 Genomic and genetic analysis of aging as a risk factor for Alzheimer's disease Conserjería de Educación de la Comunidad Autónoma de Madrid. (Centro de Biología Molecular Severo Ochoa). 2005-2006.
- 20 Search for susceptibility genes for Alzheimer's disease Obra Social Caja de Madrid. (Centro de Biología Molecular Severo Ochoa). 2002-2005.
- 21 Endoplasmic reticulum stress as pathogenetic mechanism of Alzheimer's disease Comisión Interministerial de Ciencia y Tecnología (SAF2001-0524-C02-01). (Centro de Biología Molecular Severo Ochoa). 2001-2005.
- 22 Genomic and genetic analysis of adrenergic stress as a risk factor for Alzheimer's disease Conserjería de Educación de la Comunidad Autónoma de Madrid. (Centro de Biología Molecular Severo Ochoa). 2003-2004.
- 23 Molecular analysis of Alzheimer's disease Conserjería de educación de la Comunidad Autónoma de Madrid. (Centro de Biología Molecular Severo Ochoa). 2001-2003.
- 24 Genetic factors in sporadic Alzheimer's disease Conserjería de Educación de la Comunidad de Madrid. (Centro de Biología Molecular Severo Ochoa). 2001-2002.
- 25 Genetic factors in sporadic Alzheimer's disease Conserjería de Educación de la Comunidad de Madrid (08.5/0040.1/1999). (Centro de Biología Molecular Severo Ochoa). 2000-2001.
- 26 Pathogenetic mechanism of Alzheimer's disease Fundación "Ramón Areces". (Centro de Biología Molecular Severo Ochoa). 1999-2001.

C.3. Participation in R&D and Innovation contracts

C.4. Patents

- 1 M. Carmen Ramos Martín; Sonia Campoy García; Javier S Burgos Muñoz; Jose Luis Adrio Fondevila; Javier Velasco Alvarez. PCT/ES2013/070065; WO 2013/117789. Formylated xanthocillins analogues as neuroprotectants Spain. 06/07/2016. NEURON BIOPHARMA, S.A..
- 2 Carmen Ramos Martín; Fernando Guzman Sanchez; Soraya Santana Martinez; Saleta Sierra Avila; Javier S Burgos Muñoz. ES2524647. Antiepileptic, hypocholesterolemic and neuroprotective compound Spain. 15/09/2015. NEURON BIOPHARMA, S.A..
- 3 Javier Velasco Alvarez; Javier S Burgos Muñoz; Carlos Ramírez Moreno; Saleta Sierra Avila; M. Carmen Ramos Martín; Juan M. Alfaro Sánchez; Jose Luis Adrio Fondevila. PCT/ES2011/070705; WO/2012/049346. Hypocholesterolemic, anti-inflammatory and antiepileptic neuroprotective compound Spain. 13/10/2010. NEURON BIOPHARMA, S.A..
- 4 Javier S Burgos Muñoz; M.Carmen Ramos Martín; Saleta Sierra Avila; Beatriz Suarez González; Juan M. Alfaro Sánchez. PCT/ES2011/070539; WO2012013850. Compound for treating neurodegenerative diseases, cognitive deficiencies and/or dementia Spain. 26/07/2010. NEURON BIOPHARMA, S.A..
- 5 Javier S Burgos Muñoz; Jose Luis Adrio Fondevila; M. Carmen Ramos Martín; Saleta Sierra Avila; Juan M Alfaro Sanchez; Carlos Ramirez Moreno; Sonia Campoy Garcia; Javier Velasco Alvarez; Angel Rumbero Sanchez. PCT/ES2010/070234, WO2010/119161. Neuroprotective compound Spain. 16/04/2009. NEURON BIOPHARMA, S.A..
- 6 Javier S Burgos Muñoz; M.Carmen Ramos Martín; Saleta Sierra Avila; Juan M Alfaro Sanchez; Javier Velasco Alvarez; Angel Rumbero Sanchez; Carlos Ramirez Moreno. PCT/ES2010/070126, WO2010100312. COMPUESTOS NEUROPROTECTORES Spain. 06/03/2009. NEURON BIOPHARMA, S.A..