

Date of the CVA

08/07/2019

Section A. PERSONAL DATA

Name and Surname	Rita Carmona Mejías		
DNI	25331796X	Age	46
Researcher's identification number	Researcher ID		
	Scopus Author ID		
	ORCID	0000-0002-9686-473X	

A.1. Current professional situation

Institution	University of Malaga		
Dpt. / Centre			
Address	Calle Camelia, 146. Cortijo de Torrequebrada, Benalmádena Costa, 29630, Malaga		
Phone	(+34) 649194705	Email	rita@uma.es
Professional category	University Staff Member and Researcher	Start date	1999
UNESCO spec. code	240700 - Cell biology		
Keywords	Molecular mechanism of disease; Cell culture; Developmental biology; Cell biology		

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

Bachelor/Master/PhD	University	Year

A.3. General quality indicators of scientific production

Section B. SUMMARY OF THE CURRICULUM

1995: Initiation as an interim in the Cardiovascular Development and Angiogenesis group belonging to the Animal Biology Department of the University of Malaga, whose head is Professor Dr.Ramon Muñoz-Chapuli Oriol.

1991-1997: Bachelor's Degree in Biological Science

2002: Doctoral Thesis. Awarded with the Extraordinary Doctorate Prize in 2005.

2002-2006: Collaboration in lectures (practical lessons of the core subjects of the first year of Biological Science Degree) in the Animal Biology Department. Teacher of the Master's Degree in Cellular and Molecular Biology (Experimental Techniques II subjects) from 2014 to present.

Codirector of the Masters Dissertation "Células reparadoras de peritoneo: un nuevo tipo celular de médula ósea implicado en reparación mesotelial" by Elena Cano Rincón, presented on September 21, 2010, achieving a Pass With Distinction. Director of 5 Masters Degree Thesis.

Positive evaluation by ANECA of my teaching and research projects in order to be contracted as PhD Assistant Professor and Professor for Private Universities.

Contracted formerly as a graduate and latterly as a PhD, responsible of different national research projects from 1999 to present.

Collaborator Researcher in the Main Research Team of 16 research projects, both Nacional and Internacional.

63 contributions at National and International congresses with speeches and posters. 42 publications (32 Q1; 13 first or last author) in important scientific magazines of worldwide impact and 8 publications in non-indexed scientific journals. The majority of these publications focus on the pluripotency and differentiation of embryonic epithelium cells as well as the

implication of the suppressor gene of Wilms' Tumor (Wt1) in such processes.

General quality indicators of scientific research: Source: Web of Science (FECYT).

Search Criterion: Authors: Carmona R and Muñoz-Chapuli R.

Results found: 42; Papers Q1: 32; Average impact factor (last 5 years): 6.00

Sum of the Times Cited : 1242; h-index : 21

Accreditation level B and C issued by Junta de Andalucía for the manipulation of laboratory animals.

Stays in other centres of investigation:

1. Predoctoral stay in the Anatomy and Embriology Department. Faculty of Medicine. University of Badajoz. March-April 1998. (Hybridisation techniques In situ in wholmount)
2. Postdoctoral stay in the Celular Biology Department: Faculty of Experimental Science. University of Jaen. October 2003. (Molecular Biology techniques for the labeling of riboprobes).
3. Thoracic Surgery Course: Nacional Centre of Cardiovascular Research, Madrid. Spain. February 2013
4. Postdoctoral Stay in Nicholas Hastie's Research Group (Human Genetics Unit, Medical Research Council, University of Edinburgh). 3,5 months stay (1/05/2013 – 15/08/2013. Financed by Short-Term grants of EMBO

Section C. MOST RELEVANT MERITS (ordered by typology)

C.1. Publications

- 1 **Scientific paper.** Laura Ariza; Anabel Rojas; Rita Carmona. 2019. The Wilms' tumor suppressor gene regulates pancreas homeostasis and repair PLoS Genet. 2019 Feb 14;15(2):e1007971. doi: 10.1371/journal.pgen.1007971. eCollection 2019 Feb.15-2.
- 2 **Scientific paper.** Rita Carmona; et al. 2018. Mesothelial-mesenchymal transitions in embryogenesis.Semin Cell Dev Biol. 2018 Sep 26. pii: S1084-9521(17)30538-4. doi: 10.1016/j.semcdb.2018.09.006.
- 3 **Scientific paper.** Laura Ariza; et al. 2018. Role of the Wilms' tumor suppressor gene Wt1 in pancreatic development.Dev Dyn. 2018 Jul;247(7):924-933. doi: 10.1002/dvdy.24636. Epub 2018 May 30. 247-7, pp.924-933.
- 4 **Scientific paper.** ; et al. 2017. C3G promotes a selective release of angiogenic factors from activated mouse platelets to regulate angiogenesis and tumor metastasis.Oncotarget. 2017 Nov 6;8(67):110994-111011.6-8.
- 5 **Scientific paper.** Ana Cañete; et al. (4/). 2017. Role of Vitamin A/Retinoic Acid in Regulation of Embryonic and Adult Hematopoiesis Nutrients. 9-159. ISSN 2072-6643.
- 6 **Scientific paper.** Ana Cañete; et al. (6/2). 2017. A population of hematopoietic stem cells derives from GATA4-expressing progenitors located in the placenta and lateral mesoderm of mice Haematologica. 5-4, pp.647-655. ISSN 0017-6559.
- 7 **Scientific paper.** Cristina Villa; et al. (7/). 2016. Myc overexpression enhances of epicardial contribution to the developing heart and promotes extensive expansion of the cardiomyocyte population Scientific Reports. 6, pp.35366. ISSN 2045-2322.
- 8 **Scientific paper.** Rita Carmona; et al. (5/1). 2016. Conditional deletion of WT1 in the septum transversum mesenchyme causes congenital diaphragmatic hernia in mice eLife. 19-5. ISSN 2050-084X.
- 9 **Scientific paper.** Elena Cano; et al. (10/2). 2016. Extracardiac septum transversum/proepicardial endothelial cells pattern embryonic coronary arterio-venous connections PNAS. 113-3, pp.656-661. ISSN 0027-8424.
- 10 **Scientific paper.** Ariza L; et al. 2015. Coelomic epithelium-derived cells in visceral morphogenesis.Developmental Dynamics. 245-3, pp.307-322.
- 11 **Scientific paper.** Cano E; et al. (5/2). 2015. The proepicardium keeps a potential for glomerular marker expression which supports its evolutionary origin from the pronephros.Evol Dev.17-4, pp.224-230. ISSN 1520-541X.

- 12 Scientific paper.** Delgado I; et al. (11/4). 2014. GATA4 loss in the septum transversum mesenchyme promotes liver fibrosis in mice. *Hepatology*. 59-6, pp.2358-2370. ISSN 1527-3350.
- 13 Scientific paper.** Elena Cano Tincon; et al. 2014. Signaling by retinoic acid in embryonic and adult hematopoiesis. *J. Dev. Biol.* 2-1, pp.18-33.
- 14 Scientific paper.** Arechederra M; et al. (14/2). 2013. Met signaling in cardiomyocytes is required for normal cardiac function in adult mice. *Biochim Biophys Acta*.1832-12, pp.2204-2215. ISSN 0925-4439.
- 15 Scientific paper.** Rivas V; et al. (12/2). 2013. Developmental and tumoral vascularization is regulated by G protein-coupled receptor kinase 2. *J Clin Invest.*123-1, pp.4714-4730. ISSN 0021-9738.
- 16 Scientific paper.** Cano E; Carmona R; Muñoz-Chápuli R. (3/2). 2013. Wt1-expressing progenitors contribute to multiple tissues in the developing lung. *Am J Physiol Lung Cell Mol Physiol.*305-4, pp.322-332. ISSN 1040-0605.
- 17 Scientific paper.** Pascual-Anaya J; et al. (9/4). 2013. The evolutionary origins of chordate hematopoiesis and vertebrate endothelia. *Developmental Biology*. 375-2, pp.182-192. ISSN 0012-1606.
- 18 Scientific paper.** Carmona R; et al. (5/1). 2013. Cells derived from the coelomic epithelium contribute to multiple gastrointestinal tissues in mouse embryos. *PloS One*. 8-2. ISSN 1932-6203.
- 19 Scientific paper.** Elena Cano Rincon; Rita Carmona Mejias; Ramon Munoz-Chapuli Oriol. 2013. Evolutionary Origin of the Proepicardium. *J. Dev. Biol.* 1, pp.3-19.
- 20 Scientific paper.** Carmona R; et al. (5/1). 2011. Peritoneal repairing cells: a type of bone marrow derived progenitor cells involved in mesothelial regeneration. *Journal of Cellular and Molecular Medicine*. 15-5, pp.1200-1209. ISSN 1582-1838.
- 21 Scientific paper.** Carmona R; et al. (5/1). 2010. The embryonic epicardium: an essential element of cardiac development. *J Cell Mol Med*. 14-8, pp.2066-2072. ISSN 1582-1838.
- 22 Scientific paper.** Pombal MA; et al. (5/2). 2008. Epicardial development in lamprey supports an evolutionary origin of the vertebrate epicardium from an ancestral pronephric external glomerulus. *Evolution and Development*. 10-2, pp.210-216. ISSN 1520-541X.
- 23 Scientific paper.** Ijpenberg A; et al. (10/4). 2007. Wt1 and retinoic acid signaling are essential for stellate cell development and liver morphogenesis. *Developmental Biology*. 312-1, pp.157-170. ISSN 0012-1606.
- 24 Scientific paper.** Carmona R; et al. (5/1). 2007. A simple technique of image analysis for specific nuclear immunolocalization of proteins. *J. Microsc.*225-1, pp.96-99. ISSN 0022-2720.
- 25 Scientific paper.** Guadix JA; et al. (4/1). 2006. In vivo and in vitro analysis of the vasculogenic potential of avian proepicardial and epicardial cells. *Developmental Dynamics*. 235-4, pp.1014-1026. ISSN 1058-8388.
- 26 Scientific paper.** Muñoz-Chápuli R; et al. (5/2). 2005. The origin of the endothelial cells: an evo-devo approach for the invertebrate/vertebrate transition of the circulatory system. *Evolution and Development*. 7-4, pp.351-358. ISSN 1520-541X.
- 27 Scientific paper.** Pérez-Pomares JM; et al. (5/1). 2004. Contribution of mesothelium-derived cells to liver sinusoids in avian embryos. *Developmental Dynamics*. 229-3, pp.465-474. ISSN 1058-8388.
- 28 Scientific paper.** González-Iriarte M; et al. (5/2). 2003. Hyperplastic conotruncal endocardial cushions and transposition of great arteries in perlecan-null mice. *Circulation Research*. 91-2, pp.158-164. ISSN 0009-7330.
- 29 Scientific paper.** González-Iriarte M; et al. (5/2). 2003. A modified chorioallantoic membrane assay allows for specific detection of endothelial apoptosis induced by antiangiogenic substances. *Angiogenesis*. 6-3, pp.251-254. ISSN 0969-6970.
- 30 Scientific paper.** Ramón Muñoz-Chapuli Oriol; et al. (5/2). 2003. Las múltiples caras del gen WT1: Funciones en el desarrollo e implicaciones clínicas. *Acta Pediatrica de Mexico*. 24-1, pp.29-38.
- 31 Scientific paper.** Pérez-Pomares JM; et al. (5/2). 2002. Origin of coronary endothelial cells from epicardial mesothelium in avian embryos. *Int.J.Dev. Biol.*46-8, pp.1005-1013. ISSN 0214-6282.

- 32 Scientific paper.** Muñoz-Chápuli R; et al. (6/4). 2002. [The epicardium and epicardial-derived cells: multiple functions in cardiac development]. Revista Española de Cardiología. 55, pp.1070-1082. ISSN 0300-8932.
- 33 Scientific paper.** Pérez-Pomares JM; et al. (7/4). 2002. Experimental studies on the spatiotemporal expression of WT1 and RALDH2 in the embryonic avian heart: a model for the regulation of myocardial and valvuloseptal development by epicardially derived cells (EPDCs). Developmental Biology. ACADEMIC PRESS INC ELSEVIER SCIENCE, 525 B ST, STE 1900, SAN DIEGO, CA 92101-4495 USA. 247, pp.307-326. ISSN 0012-1606.
- 34 Scientific paper.** Rodríguez-Nieto S; et al. (6/3). 2002. Antiangiogenic activity of aeroplysinin-1, a brominated compound isolated from a marine sponge. FASEB Journal. 16, pp.261-263. ISSN 1530-6860.
- 35 Scientific paper.** Muñoz-Chápuli R; et al. (6/3). 2002. Cellular precursors of the coronary arteries. Texas Heart Inst. 29, pp.243-249. ISSN 0730-2347.
- 36 Scientific paper.** Carmona R; et al. (4/1). 2001. Localization of the Wilm's tumour protein WT1 in avian embryos. Cell and Tissue Res. 201-2, pp.103-109. ISSN 0302-766X.
- 37 Scientific paper.** Muñoz-Chápuli R; et al. 2001. The epicardium as a source of mesenchyme for the developing heart. Italian Journal of Anatomy and Embryology. 106-2, pp.187-196.
- 38 Scientific paper.** Carmona R; et al. (1/1). 2000. Immunolocalization of the transcription factor Slug in the developing avian heart. Anatomy and Embryology. SPRINGER VERLAG, 175 FIFTH AVE, NEW YORK, NY 10010 USA. 201-2, pp.103-109. ISSN 0340-2061.
- 39 Scientific paper.** Muñoz-Chápuli R; et al. (6/5). 1999. Differentiation of hemangioblasts from embryonic mesothelial cells? A model on the origin of the vertebrate cardiovascular system. Differentiation. 64, pp.133-141. ISSN 0301-4681.
- 40 Scientific paper.** Macías D; et al. (6/4). 1998. Immunoreactivity of the ets-1 transcription factor correlates with areas of epithelial-mesenchymal transition in the developing avian heart. Anatomy and Embryology. 198, pp.307-315. ISSN 0340-2061.
- 41 Book chapter.** (5/4). 2017. The multiple functions of the proepicardial/epicardial cell lineage in heart development. The ESC textbook of Cardiac Development (J.M. Pérez Pomares & Robert Kelly, eds.) In press. Oxford University Press.
- 42 Review.** Rita Carmona; Laura Ariza; Ana Cañete. 2018. Comparative developmental biology of the cardiac inflow tract. J Mol Cell Cardiol. 2018 Mar;116:155-164. doi: 10.1016/j.yjmcc.2018.02.004.116, pp.155-164.
- 43 Review.** Elena Cano; Rita Carmona; Ramon Muñoz-Chapuli. 2013. Signaling by Retinoic Acid in Embryonic and Adult Hematopoiesis. J. Dev. Biol. 2013, 1, 3-19; doi:10.3390/jdb1010003.

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

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

C.4. Patents