CURRICULUM VITAE ABREVIADO (CVA)

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

Part A. PERSONAL INFORMATION

First name	M.Carmen		
Family name	Ruiz Ruiz		
Gender (*)	Female	Birth date (dd/mm/yyyy)	
Social Security, Passport, ID number			
e-mail	mcarmenr@ugr.es	URL Web	
Open Researcher and Contributor ID (ORCID) (*)		0000-0002-6243-6227	

(*) Mandatory

A.1. Current position

Position	Catedrática de Universidad		
Initial date	June 2022		
Institution	Universidad de Granada		
Department/Center	Bioquímica y Biología Molecular 3 e Inmunología		Facultad de Medicina
Country	España	Teleph. number	958246631
Key words	Immunology, Cell death, Endometrial stromal cells		

A.2. Previous positions (research activity interuptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
1992-1997	PhD fellow (FPI), IPB-Lopez-Neyra, CSIC
1997-2001	Post-doctoral Fellows, IPB-Lopez-Neyra, CSIC
2002-2005	Researcher – Programa Ramón y Cajal, Universidad de Granada
2005-2009	Profesora Contratada Doctora, Universidad de Granada
2009-2022	Profesora Titular de Universidad, Universidad de Granada

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD in Pharmacy	Universidad de Granada	1997
Licensed in Pharmacy	Universidad de Granada	1992

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

Degree in Pharmacy from the University of Granada (First National Prize for University Studies, 1992) and Doctor in Pharmacy from the same University (1997). My scientific activity was initially focused on the study of cell death by apoptosis in different physiological and pathological contexts. My doctoral thesis was supervised by Dr. López Rivas at the IPB-LN, CSIC, Granada. I received an FPI grant and I could participate in several national and international projects. Moreover, I was in three foreign research centers for short-term stays. During the postdoctoral stage, from 1997 to 2001, I was recipient of a scholarship from the Scientific Foundation of the AECC, a scholarship associated to a project of the Ramón Areces Foundation and a contract with a FEDER project, while I continued studying the regulation of apoptosis induced by death ligands in breast cancer cells with Dr. López Rivas. This pre- and post-doctoral period resulted in 15 publications in journals of high impact factor. In 2002, I started my career at the University of Granada by obtaining a contract from the Ramón y Cajal Program to carry out a project on IFN-gamma regulation of death receptor-mediated apoptosis in tumor cells. The collaboration with Dr. López Rivas in an international project of the AICR at this stage resulted in six articles in journals of high impact factor.

In 2003, I had a first project of the National Plan as PI for the study of the signals that regulate the expression and function of TRAIL in T cells. Since then, I have had nine projects as PI,

from national and regional public calls and from the UGR's own Plan, I have participated in eight projects as a member of the research team and I have maintained numerous collaborations with national and foreign researchers: Drs. García Olivares, Ruiz de Almodóvar and Porras (U. Granada), Oliver Pozo (CSIC), Schulze-Osthoff (U.Tubingen, Germany), Croy (Queen's University, Canada), Parolini (Catholic U. Sacred Heart, Rome) and Köster and Forsyth (ILL, Grenoble, France), among others. The research lines followed in these years have been: i) the characterization of the mechanism of anti-tumor action of epigenetic drugs in leukemic cells; ii) the study of the induction of apoptosis by bacterial exopolysaccharides; iii) the study of decidual and endometrial (eutopic and ectopic) stromal cells, their phenotype, immunomodulatory, decidualization and apoptosis induction ability, in collaboration with the PAIDI CTS-564 group to which I belong; iv) the study of new compounds for application in boron neutron capture anti-tumor therapy (BNCT), forming the first research group in Spain in BNCT and participating in several experiments in the Institute Laue-Langevin (ILL-Neutrons for Science, Grenoble, France). These projects and collaborations have resulted in 27 publications in relevant journals within their corresponding areas, in addition to eight doctoral theses supervised, two more in progress, and 25 Master thesis projects.
I have been reviewer of more than 30 manuscripts for JCR journals and have participated in the evaluation of more than 15 national and international projects (calls of Instituto de Salud Carlos III, National R&D Plan, Generalitat Valenciana, Region of Murcia and the Ministerio de Ciencia, Tecnología e Innovación from Argentina). In addition, I was member of the Organizing Committee of the 3rd IPLASS (International Placenta Stem Cell Society) Meeting, (Granada, 2014); of the Scientific Committees of the 7th Young Researchers' Boron Neutron Capture Therapy Meeting (Granada, 2013) and the 19th International Congress on Neutron Capture Therapy (ICNCT 19, Granada, 2021); and I am coordinator of the Apoptosis Spanish Network since 2014, organizing the XIII Aporeunión (2017, Granada).
As University Professor, I have been teaching since 2003 in several Bachelor and Master degrees. I participated in the development of the Pharmacy Degree Curriculum, I have been the coordinator of the area of Immunology in the Department to which I belong (Biochemistry and Molecular Biology 3 and Immunology) during eight years, and I have participated during five years in the management of the Doctoral Programme in Biomedicine (RD99/2011), initially as the secretary and, from September 2013 to June 2017, as the Coordinator. Since July 2017 I am the Director of the Doctoral School in Health Sciences at the University of Granada.

Part C. RELEVANT MERITS *(sorted by typology) (*most relevant in the last ten years*)*

C.1. Publications *(see instructions)*

CA: Corresponding author; (nº x / nº y): submitting author position / total authors

Ruiz-Magaña MJ, Puerta JM, Llorca T, Méndez-Malagón C, Martínez-Aguilar R, Abadía-Molina AC, Olivares EG, Ruiz-Ruiz C (CA). 2022. Influence of the ectopic location on the antigen expression and functional characteristics of endometrioma stromal cells. Reproductive Biomedicine Online. doi: 10.1016/j.rbmo.2022.12.005 (in press).

Ruiz-Magaña MJ, Llorca T, Martinez-Aguilar R, Abadia-Molina AC, Ruiz-Ruiz C (CA), Olivares EG. 2022. Stromal cells of the endometrium and decidua: in search of a name and an identity. Biology of Reproduction, 107:1166-1176.

Ruiz-Magaña MJ, Martinez-Aguilar R, Llorca T, Abadía-Molina AC, Ruiz-Ruiz C (CA), Olivares EG. 2021. Decidualization modulates the mesenchymal stromal/stem cell and pericyte characteristics of human decidual stromal cells. Effects on antigen expression, chemotactic activity on monocytes and antitumoral activity. Journal of Reproductive Immunology, 145:103326.

Szukiewicz D, Stangret A, Ruiz-Ruiz C, Olivares EG, Soriţău O, Suşman S, Szewczyk G. 2021. Estrogen- and Progesterone (P4)-Mediated Epigenetic Modifications of Endometrial Stromal Cells (EnSCs) and/or Mesenchymal Stem/Stromal Cells (MSCs) in the Etiopathogenesis of Endometriosis. Stem Cell Reviews and Reports, 17:1174.

Martínez-Aguilar R, Romero-Pinedo S, Ruiz-Magaña MJ, Olivares EG, Ruiz-Ruiz C (CA), Abadía-Molina AC. 2020. Menstrual blood-derived stromal cells modulate functional properties of mouse and human macrophages. Scientific Reports,10:21389.

Pedrosa-Rivera M, Praena J, Porras I, ... Ruiz-Ruiz C (CA, 13/14), Ruiz-Magaña MJ. 2020. Thermal neutron relative biological effectiveness factors for Boron Neutron Capture Therapy from in vitro irradiations. Cells, 9:2144.

Ruiz-Magaña MJ, Puerta JM, Martínez-Aguilar R, Llorca T, Blanco O, Muñoz-Fernández R, Olivares EG, Ruiz-Ruiz C. 2020. Endometrial and decidual stromal precursors show a different decidualization capacity. Reproduction,160:83-91.

Muñoz Fernández R, de la Mata C, Requena F, … Ruiz-Ruiz C* (position 8/9), Olivares EG*. 2019. Human predecidual stromal cells are mesenchymal stromal/stem cells and have a therapeutic effect in an immune-based mouse model of recurrent spontaneous abortion. Stem Cell Research & Therapy, 10:177.

Ruiz-Magaña MJ, Martínez-Aguilar R, Lucendo E, Campillo-Davo D, Schulze Osthoff K, Ruiz-Ruiz C (CA). 2016.The antihypertensive drug hydralazine activates the intrinsic pathway of apoptosis and causes DNA damage in leukemic T cells. Oncotarget, 7:21875-86.

Leno-Durán E, Ruiz-Magaña MJ, Muñoz-Fernández R, Requena F, Olivares EG, Ruiz-Ruiz C (CA). 2014. Human decidual stromal cells secrete soluble pro-apoptotic factors during decidualization in a cAMP-dependent manner. Human Reproduction, 29:2269-2277.

Rodríguez-Vargas JM, Ruiz-Magaña MJ, Ruiz-Ruiz C (3/12), … Oliver FJ. 2012. ROS-induced DNA damage and PARP-1 are required for optimal induction of starvation-induced autophagy. Cell Research, 22:1181-1198.

Ruiz-Magaña MJ, Rodríguez-Vargas JM, Morales JC, Saldivia MA, Schulze-Osthoff K, Ruiz-Ruiz C (CA). 2012. The DNA methyltransferase inhibitors zebularine and decitabine induce mitochondria-mediated apoptosis and DNA damage in p53 mutant leukemic T cells. International Journal of Cancer, 130:1195-1207.

C.2. Congress, indicating the modality of their participation (invited conference, oral presentation, poster)

Oral presentation: “Neutron irradiations of in-vitro samples at Institut Laue-Langevin”. Pedrosa M, Porras I, Praena J, Ruiz-Magaña MJ, Ruiz-Ruiz C, Forsyth T, Köster U. 10th Young Researchers BNCT Meeting, 2019, Helsinki, Finlandia.

Oral presentation: “Radiobiology experiments for thermal and epithermal RBE factors in BNCT”. Pedrosa M, Ruiz-Magaña MJ, Praena J, Sabariego M, Köster U, Ruiz-Ruiz C, Porras I. 18th International Congress on neutron capture therapy, 2018, Taipei, Taiwan.

Oral presentation: “Differences in the culture of endometrial stromal cells (EnSC) in patients with endometriosis”. Puerta Sanabria JM, Martínez Aguilar R, Llorca Colomina T, Abadía Molina A, García-Olivares E, Ruiz-Ruiz C, Ruiz-Magaña MJ. 4th Congress of the “Society of Endometriosis and Uterine Disorders” (SEUD), 2018, Florencia, Italia.

Oral presentation: “Decidualization modulates the immune response at the human maternal-fetal interface”. Ruiz-Magaña MJ, Muñoz-Fernández R, Martínez Aguilar R, Toro Carretero E, Sánchez Fernández JL, Abadía Molina A, Romero Pinedo S, Ruiz-Ruiz C, García-Olivares E. 39 Congreso de la Sociedad Española de Inmunología, 2016, Alicante.

Oral presentation: “Human decidual estromal cells, like mesenchymal cells, exert immunoregulatory activities”. Muñoz-Fernández R, García-Morales D, Prados-Martín A, Perea-Martínez A, Ruiz-Magaña MJ, Ruiz-Ruiz C, Olivares E. 37 Congreso de la Sociedad Española de Inmunología, 2013, Salamanca.

Oral presentation: “Therapeutic potential of human decidual stromall cells on the spontaneous resorption rate in the abosortion-prone CBA/J x DBA/2J mating”. García-morales D, Muñoz-Fernández R, Leno-Durán E, Prados A, Ruiz-Magaña MJ, Requena F, Ruiz-Ruiz C, García-Olivares E. 2nd International Placenta Stem Cell Society Meeting, 2012, Viena, Austria.

C.3. Research projects, indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.

HR22-00214. New Approaches in Radiotherapy by Neutron Irradiation for Application to cancers of bad prognosis. CaixaResearch Health 2023. PI: C. Ruiz Ruiz. University of Granada. 1 000 000 €. In revision.

PP-2021-12. Bloqueo del diálogo molecular entre las células endometriales estromales y los macrófagos en la patogenia de la Endometriosis - Propuesta de tratamiento. Proyectos Precompetitivos del Plan Propio. PI: C. Ruiz Ruiz, University of Granada. 01/01/2022-31/12/2022. 3000 €.

B-FQM-156-UGR20. Experimentos para fusión como fuente de energía y protección radiológica en misiones espaciales. Proyectos de I+D+I del Programa Operativo FEDER de Andalucía 2014-2020, 2020. PI: C. Ruiz Ruiz and J. Praena, University of Granada. 01/07/2021-30/06/2023. 50 000 €

PI16/01642. Endometriosis y células endometriales estromales. Desarrollo de un modelo murino de endometriosis para el estudio de la patogenia y el tratamiento. Instituto de Salud Carlos III, 2016. PI: C. Ruiz Ruiz and E. García Olivares, University of Granada. 01/01/2017-06/30/2020. 110 715 €.

Estudio y diseño de nuevos tratamientos de radioterapia selectiva del cáncer mediante captura de neutrones por boro basada en acelerador electrostático de baja energía. Scientific Foundation of the AECC. PI: I. Porras Sánchez, University of Granada. 09/01/2016-08/31/2019. 143 000 €. Researcher.

PROY-PP-2015-14. Estrategias antitumorales alternativas: inducción de apoptosis por células endometriales estromales y nuevas formas de terapia mediante captura de neutrones. Proyectos Precompetitivos del Plan Propio. PI: C. Ruiz Ruiz, University of Granada. 01/01/2016-31/12/2016. 2575 €.

P10-CTS-6183, Estudio de las células endometriales estromales humanas y su participación en la etiopatogenia de la endometriosis. Consejería de Economía, Innovación y Ciencia de la Junta de Andalucía, proyectos de Investigación de Excelencia, 2010. PI: C. Ruiz Ruiz, University of Granada. 03/15/2011-12/31/2015. 151 280 €.

Estudio de nuevas rutas para la producción de radioisótopos de uso en medicina, de la obtención de radioisótopos emergentes y de las posibles aplicaciones médicas de nuevos radioisótopos. Campus de Excelencia Internacional BioTic. III, 2014. PI: F. Arias de Saavedra Alías, University of Granada. 06/02/2014-12/31/2014. 20 500 €. Researcher.

20F12/41, Estudio de nuevos compuestos y nanoestructuras de boro como blancos potenciales para la terapia del cáncer mediante captura de neutrones. Campus de Excelencia Internacional BioTic, 2012. Compromiso con la Investigación y el Desarrollo. PI: I. Porras Sánchez, University of Granada. 01/01/2012-12/31/2012. 20 000 €. Researcher.

C.4. Contracts, technological or transfer merits, Include patents and other industrial or intellectual property activities (contracts, licenses, agreements, etc.) in which you have collaborated. Indicate: a) the order of signature of authors; b) reference; c) title; d) priority countries; e) date; f) Entity and companies that exploit the patent or similar information, if any

Aid for predoctoral felow UGR-CIEMAT, in the context of IFMIF-DONES project. 2021. PI: M. Carmen Ruiz Ruiz. 50 347 €

Radiobiology and Dosimetry studies for BNCT. PI: Ignacio Porras Sánchez. Institute Max von Laue - Paul Langevin and University of Granada. 10/01/2016-10/01/2019. 104 771 €. Researcher.

PEJ2018-004234-A. Aid for the promotion of young employment and implementation of “Garantía Juvenil” R&D+ I, 2018. PI: M. Carmen Ruiz Ruiz. 39 200€

Patent: P201500022. MC Ruiz Ruiz; J López Peñalver; V de Araujo Farias; MJ Ruiz de Almodóvar Rivera. Células madre activadas y usos médicos 2014.