

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 ^a PAZ		
Family name	CARRASCO-JIMÉNEZ		
Gender (*)	Female	Birth date (dd/mm/yyyy)	
Social Security, Passport, ID number			
e-mail	mpazcj@ugr.es	URL Web: https://cts236.ugr.es/	
Open Researcher and Contributor ID (ORCID) (*)		0000-0003-1300-5196	

(*) Mandatory

A.1. Current position

Position	University Full Professor		
Initial date	08/02/2019		
Institution	University of Granada		
Department/Center	Biochemistry and Molecular Biology I	Faculty of Sciences	
Country	Granada	Teleph. number	+34 958 243248
Key words	Lipids, lipid metabolism, anticancer		

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

Period	Position/Institution/Country/Interruption cause
01/01/1990- 31/12/1993	Predocctoral Fellowship from the University Teaching Training Program (FPU)/University of Granada/Spain/Obtaining the next grant (48 months)
1/07/1994- 30/09/1995	Postdoctoral Fellowship from the Own Plan of the University of Granada/John Radcliffe Hospital (Oxford University)/United Kingdom/Obtaining the next grant (15 months)
01/10/1995- 31/05/1997	Postdoctoral Fellowship of the Sectorial Program for Teacher and Research Staff Training Abroad/ John Radcliffe Hospital (Oxford University)/United Kingdom/Obtaining the next grant (20 months)
01/06/1997- 31/07/1997	Contract for the Incorporation of Doctors to Research Teams at the University of Granada/ University of Granada/Spain/Obtaining the next contact (1 month)
01/08/1997- 30/09/1998	Contract for the Incorporation of Doctors and Technologists to Research Groups in Spain. Ministry of Education and Science/University of Granada/Spain/Obtaining the next contact (14 months)
01/10/1998 - 30/09/2000	Assistant Professor L.R.U. of Faculty, 1st period/University of Granada/Spain/Obtaining the next contract (24 months)
01/10/2000- 30/09/2001	Associate Professor Type 3/University of Granada/Spain/Obtaining the next contract (12 months)

01/10/2001 - 07/08/2002	Interim Associate University Professor/University of Granada/Spain/Obtaining the next contract (11 months)
08/08/2002- 07/02/2019	Associate University Professor/University of Granada/Spain/Obtaining the next contract (198 months)
08/02/2019- present	University Full Professor University of Granada/Spain/Obtaining the next contract

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Degree in Pharmacy	University of Granada	1989
PhD in Pharmacy	University of Granada	1994

(Include all the necessary rows)

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

My scientific and professional career began in the Department of Biochemistry and Molecular Biology at the University of Granada, supported by an FPU predoctoral fellowship from the Spain's Ministry of Education and Science. I reached the PhD degree in Pharmacy in February 1994. My Doctoral Thesis provided valuable insights into how ethanol impacts lipid metabolism, explaining pathologies associated with excessive alcohol consumption.

I commenced my postdoctoral training in 1994 at the Nuffield Department of Obstetrics and Gynecology at Oxford University under the supervision of Dr. López-Bernal. My research center on the regulation of uterine activity and the mechanisms of signal transduction in myometrial cells, thereby contributing to the advancement of our understanding of the signals leading to preterm labor. I successfully completed a 35-month postdoctoral period, financed by grants from the University of Granada and Spain's Ministry of Education and Science.

In 1997, I returned to the University of Granada, initiating a new research line focused on the impact of alkylphospholipids on lipid metabolism, this work resulted in significant contributions, particularly understanding the effects of antitumor compounds on lipid metabolism. Subsequently, my research shifted towards the study of antitumor synthetic agents that exert their activity by inhibiting metabolic pathways. We also investigate methods to facilitate the entry of these compounds into tumor cells. This information has been crucial for evaluating the potential of these molecules in future clinical trials.

Since 2004, I have assumed full responsibility for my research, directing projects in various calls, including the Plan Propio of the University of Granada, Health Research of the Ministry of Health and Consumer, Research of Excellence of the Andalusian Regional Government, R+D+i projects of the Operational Program FEDER 2020 and the Ministry of Science and Innovation, which proves my ability to lead quality scientific research and obtain public funding in competitive calls. I have been Principal Investigator of a total of 5 projects and I am responsible for the Research Group CTS236 of the Junta de Andalucía. In addition, I have participated in the research team in a total of 13 projects. My scientific contribution includes a total of 60 publications in international journals indexed in the Science Citation Index (SCI), with the majority of them are in the first quartile of their category, and a considerable percentage in the first decile. I am first author of 10 articles and responsible author of 22 of them. I have presented more than 90 communications at scientific congresses. I have been awarded 5 consecutive six-year periods of research spanning between 1990 and 2020. I present numerous contributions to conferences and congresses in the specialty. I collaborate as a reviewer for international journals with high impact index indexed in SCI, I have also collaborated with the evaluation agency ANEP in the evaluation of several research projects. I have also participated in the evaluation of international projects. In the area of transfer to the productive sector, I hold a patent.

As a university professor, I have more than 30 years of experience in teaching at the university level, with 6 recognized consecutive five-year teaching periods. In addition, I have actively engaged in teaching within doctoral programs with quality mention. I have supervised and directed one doctoral



theses, which received European Doctorate mention. Furthermore, I have supervised a considerable number of Master's Theses and Final Degree Projects.

Other scientific and professional quality indicators:

- Total citations: 1402 (Google Scholars); 1021 (Web of Science); 1082 (Scopus)

-Citing articles: 697 (Web of Science);

-H index: 21 (Google Scholars); 18 (Web of Science); 19 (Scopus)

-Index i10: 40 (Google Scholars)

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (see instructions)

1. Lazaro M, Lupiañez P, Sola-Leyva A, ..., **Carrasco-Jiménez MP***, Iglesias GR. (2024). The importance of cell uptake in photothermal treatments mediated by biomimetic magnetic nanoparticles. *Colloids and Surfaces B: Biointerfaces*. 234: 113722. (8/9)
2. Luque-Navarro PM, **Carrasco-Jiménez MP***, Goracci L,...,López Cara LC. (2023). New bioisosteric sulphur-containing choline kinase inhibitors with a tracked mode of action. *Eur J Med Chem*. 246:115003. (2/15)
3. Luque-Navarro PM, Mariotto E, Ballarotto M, ..., **Carrasco-Jimenez MP***, López-Cara LC. (2022). Biological Evaluation of New Thienopyridinium and Thienopyrimidinium Derivatives as Human Choline Kinase Inhibitors. *Pharmaceutics*. 14:715. (13/14)
4. García-Molina P, Sola-Leyva A, Luque-Navarro PM, ..., **Carrasco-Jiménez MP***. (2022). Anticancer activity of the choline kinase inhibitor PL48 is due to selective disruption of choline metabolism and transport systems in cancer cell lines. *Pharmaceutics*. 14: 246. (12/12)
5. Schiaffino-Ortega, S, Mariotto E, Luque-Navarro PM,, **Carrasco-Jiménez MP***, ..., López-Cara LC. (2021). Anticancer and Structure Activity Relationship of Non-Symmetrical Choline Kinase Inhibitors. *Pharmaceutics*. 13: 1360. (8/10)
6. Jabalera Y, Sola-Leyva A, **Carrasco-Jiménez MP***, Iglesias GR, Jimenez-Lopez C. (2021) Synergistic photothermal-chemotherapy based on the use of biomimetic magnetic nanoparticles. *Pharmaceutics*. 13:625.
7. Sola-Leyva A, Jabalera Y, Chico-Lozano MA, **Carrasco-Jiménez MP***, Iglesias GR, Jimenez-Lopez C. (2020). Reactive oxygen species (ROS) production in HepG2 cancer cell line through the application of localized alternating magnetic field. *J Mater Chem B*. 8(34):7667-7676.
8. Jabalera Y, Sola-Leyva A, Peigneux A, ..., **Carrasco-Jiménez MP***, Jiménez-López C. (2019). Biomimetic Magnetic Nanocarriers Drive Choline Kinase Alpha Inhibitor inside Cancer Cells for Combined Chemo-Hyperthermia Therapy. *Pharmaceutics*.11:408. (10/11)
9. Sola-Leyva A, López-Cara LC, Ríos-Marco P, Ríos A, Marco C, **Carrasco MP***. (2019). Choline kinase inhibitors EB-3D and EB-3P interferes with lipid homeostasis in HepG2 cells. *Sci Rep*. 9:5109.
10. Ruiz B, Figuerola-Conchas A, Ramos-Torrecillas J, ..., **Carrasco MP**, ..., Entrena A*, Hurtado-Guerrero R*, Conejo-García A*. (2014). Discovery of a new binding site on human choline kinase $\alpha 1$: design, synthesis, crystallographic studies, and biological evaluation of asymmetrical bispyridinium derivatives. *J Med Chem*. 57:507-515. (6/11)

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

- Luque-Navarro P, Aguilar-Troyano F; Rubbini G; Fasiolo A; Gallo-Mezo MA, Marco C, **Carrasco-Jiménez MP**, López-Cara LC. XVIII Congreso de la Sociedad Española de Química Terapéutica. 23-26 January. 2018. Salamanca, Spain. Oral presentation. National.
- Luque Navarro PM, Aguilar-Troyano F, Rubbini G, Fasiolo A, Sola-Leyva A, **Carrasco-Jiménez MP**, Marco C, López-Cara LC. V Symposium of Medicinal Chemistry Young Researchers. 22 June. 2018. Madrid, Spain. Póster. Internacional.
- Sola-Leyva A, Jabalera Y Luque-Navarro PM, Fasiolo A, Parisini E, Torretta A, López-Cara LC, Iglesias GR, Jimenez-Lopez C, **Carrasco-Jiménez MP**. 43rd Annual Meeting of the Spanish Society of Biochemistry and Molecular Biology. 19-22 July. 2021. Barcelona, Spain. Póster. Nacional.
- García-Molina P, Sola-Leyva A, Luque-Navarro PM, Parisini E, Torretta A, Jiménez-López JM, López-Cara LC, Ríos-Marco P, Ríos A, Marco C, **Carrasco-Jiménez MP**. 43rd Annual

Meeting of the Spanish Society of Biochemistry and Molecular Biology. 19-22 July. 2021. Barcelona, Spain. Póster. Nacional.

- Iglesias GR, Sola-Leyva A, Jabalera Y, Chico-Lozano MA, **Carrasco-Jiménez MP**, Jiménez-López C. 2nd International Conference on Nanomaterials Applied to Life Sciences. 29 July. 2020. Madrid, Spain. Oral presentation. Internacional.
- García-Vargas PJ, Sola-Leyva A, Laso A, Lupiáñez P, Pozo-Gualda T, Jabalera Y, Luque-Navarro PM, Lanari D, López-Cara LC, Jiménez-López C, Iglesias Salto G, **Carrasco-Jiménez MP**. 44 Congress of the Spanish Society of Biochemistry and Molecular Biology. 6-9 September. 2022. Málaga, Spain. Póster. Nacional.
- Lupiáñez P, García-Vargas PJ, Lázaro-Callejón M, Sola-Leyva A, Pozo-Gualda T, Jabalera Y, Iglesias G, Jiménez-López C, **Carrasco-Jiménez MP**. Nanomaterials Applied to Life Sciences, Santander, Spain, 27-29 April. 2022. Oral presentation. Internacional.
- Iglesias-Salto G, Lázaro M, Lupiáñez P, Sola-Leyva A, Oltolina F, Jiménez-López C, **Carrasco-Jiménez MP**. International Conference on Magnetic Fluids, 12-16 June. 2023. Granada, Spain. Oral presentation. Internacional.
- Lázaro M, Lupiáñez P, Delgado AV, Arias JL, **Carrasco-Jiménez MP**, Iglesias GR. "Magnetophotothermal synergy applied to goldcoated magnetic nanorods". International Conference on Magnetic Fluids. 12-16 June. 2023. Granada, Spain. Oral presentation. Internacional.

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

1. Title: Desarrollo y evaluación de nuevos antitumorales alquilfosfolípidos que modifican la homeostasis intracelular de colesterol. Proy. P11-CVI-7859. Funding agency: Junta de Andalucía. 168.682,00 euros. 29/07/2013-26/03/2016. Principal Investigator: **M^a Paz Carrasco Jiménez**
2. Title: Potencial terapéutico de nuevos inhibidores de la actividad colina quinasa. Repercusión en el metabolismo lipídico: estrategia de amplio espectro contra el cáncer. Ref. PID2019-109294RB-I00. Funding agency: Ministerio de Ciencia e Innovación. 121.000,00 euros. 1/06/2020-31/07/2024. Principal Investigator: Luisa Carlota López Cara/ **M^a Paz Carrasco Jiménez**
3. Title: Potencial terapéutico de nuevos inhibidores de la actividad colina quinasa. Repercusión en el metabolismo lipídico: estrategia de amplio espectro contra el cáncer. B-CTS-216-UGR20. Funding agency: Proyectos I+D+i del Programa Operativo FEDER 2020. 25.000,00 euros. 1/07/2021-30/06/2023. Principal Investigator: Luisa Carlota López Cara/ **M^a Paz Carrasco Jiménez**
4. Title: Synergy of photo- and magnetic hyperthermia by means of bifunctional nanoparticles, and its influence on cell death by ROS production Ref. P20_00346. Fundin agency: Proyectos I+D+i del Programa Operativo FEDER 2020. 116.050,00 euros. 4/10/2021-30/06/2023 Principal Investigator: Guillermo R. Iglesias Salto
5. Title: Nanoplataformas Magnéticas Biomiméticas Multifuncionales (BioMag). PDC2021-121135-I00. Fundin agency: Ministerio de Ciencia y Educación. Convocatoria 2021-"Proyectos Pruebas de Concepto". 2021-2024. 146.050 euros. Principal Investigator: Concepción Jiménez López

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

A. Entrena Guadix, L. C. López Cara, A. Espinosa Ubeda, S. Schiaffino Ortega, C. Marco de la Calle, **M. P. Carrasco Jiménez**, P. Ríos Marco, G. Viola, R. Bortolozzi, G. Basso. Symmetrical polar inhibitors of choline kinase with anti-tumour activity. N^a de publicación: WO/2015/185780. N^o de solicitud internacional: PCT/ES2015/070437. Applicant: University of Granada