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	**Ana**		
Family name	**Conejo-García**		
e-mail	[redacted]	URL Web	
Open Researcher and Contributor ID (ORCID) (*)	**0000-0001-5776-7315**		

(*) Mandatory

A.1. Current position

Position	**Professor of Organic Chemistry**		
Initial date	**04/11/2018**		
Institution	**University of Granada**		
Department/Center	**Department of Pharmaceutical and Organic Chemistry**	**Faculty of Pharmacy**	
Country	**Spain**	Teleph. number	[redacted]
Key words	**Medicinal chemistry, Drug design, Anticancer compounds, Targeted therapy, Translational research**		

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

Period	Position/Institution/Country/Interruption cause
2009-2018	Associate Professor/ Spain (three maternity leaves 2009, 2011 and 2014 Total: 20 months)
2009-2006	Assistant Professor/ Spain
2003-2005	Marie Curie Fellowship/ United Kingdom
2003	Postdoctoral researcher/ Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Graduate in Pharmacy	University of Granada	1998
Doctoral Thesis in Pharmacy	University of Granada **(PhD Extraordinary award)**	2002

Part B. CV SUMMARY

I obtained my **BSc in Pharmaceutical Sciences** at the University of Granada (UGR) in 1998. I then gained a competitive FPU fellowship from the Spanish Ministry of Education (MEC) to conduct my PhD in the Department of Pharmaceutical and Organic Chemistry at the UGR. During this period, I worked on a medicinal chemistry project focused on ChoK inhibitors as anticancer compounds. Funded by MEC, I did a research stay at the University Collegue of London (UK) under the supervision of Prof. Ganellin (2000). Once I obtained my **PhD** degree (2002, Summa cum Laude, **UGR PhD Extraordinary award**), I got a **postdoctoral** contract from UGR within my department. In 2003, I joined the University of Oxford (Chemistry Research Laboratory) as a postdoctoral researcher in Prof. Schofield's group, funded by the Ramón Areces Foundation and later by the European Commission (MEIF-CT-2003-500521) where I worked in a highly multidisciplinary group and I gained training in molecular modeling, protein purification, and kinetic assays. In 2006, I returned to the UGR as Assistant Professor at the Department of Pharmaceutical and Organic Chemistry, in 2009 I was promoted to Associate Professor and since 2018 I am Professor of Organic Chemistry.

During my research career, I have published **79 articles in peer-review international journals** highlighting: a) a publication in the prestigious journal Cell, led by Harvard University,

in which we assessed one of the ChoK inhibitors to prove the role of lysophosphatidylcholine in the regulation of the sexual stage differentiation in *P. falciparum*; and b) a publication about the mechanism of allosteric coupling in ChoKα1 caused by a rationally designed inhibitor in Angew. Chem that was featured as "VIP". I am also a co-author 3 papers in non-indexed scientific journals with a relative quality index, **5 book chapters** in prestigious international publishers, **4 patents** and more than 100 contributions presented at international and national conferences.

My research has been **funded by competitive grants** from the European Union, Spanish Ministry of Economy and Competitiveness, Science and Innovation, Junta de Andalucía, and UGR, exceeding €1.25M, with leadership as **Principal Investigator (PI) in four projects**.

I currently serve as PI of the CTS130-Drug research and development group of the Junta de Andalucía, PI of A03-Bioactive Molecules group of the Health Research Institute of Granada, and member of the UGR Excellence Group in Chemistry, consolidating my leadership in translational medicinal chemistry.

We have established **different collaborations at the international level** with the Universities of Harvard (USA), Saint Andrews, Oxford, Bath and University Collegue of London (UK), Uppsala (Sweden), Hashemite University (Jordania), Vienna (Austria), Federal do Rio Grande do Sul (Brazil), Bari, Perugia, Milano, Bologna and Pavia (Italy) that **have resulted in more than 25 joint papers**.

I have participated in several **events to disseminate research to society** such as the Science Week and Women in Science organized by the UGR as well as divulgative scientific activities such as the Initiation Project to Research and Innovation in Secondary in Andalusia and the Scientific Summer Campus 2021 of the Ministry of Education to introduce science to the young generations.

Regarding the **training of young researchers** I have supervised three doctoral thesis (Dr. Rubio, 2012, Dr. Morales, 2014 and Dr. Espejo, 2023) all three with the highest rating and International Doctoral mention in official Doctoral Programs with Mention of Quality. To complete their formation Dr. Rubio joined the groups of Prof. Bradley (University of Edinburgh, United Kingdom), Dr. Carragher (Edinburgh Research Cancer Center) and Dr. Unciti (Edinburgh Research Cancer Center); Dr. Morales joined the groups of Prof. Ciufolini (University of Vancouver, Canada), Prof. Wallace (University of Aberdeen, United Kingdom), and Prof. Giordano (Sbarro Institute for Cancer Research and Molecular Medicine, Temple University, USA) and Dr. Espejo join the group of Prof. Guerrini (University of Ferrara) and Dr. Hurtado (BIFI, University of Zaragoza). 12 papers and 1 patent were derived from Dr. Rubio thesis, she is currently Associate Professor in the UGR. 4 papers and 1 patent were derived from Dr. Morales thesis, she is currently Associate Professor at the University of Seville. 5 papers have been derived from Dr. Espejo for the time being. I am currently supervising two doctoral theses. I have also supervised 4 bachelor's thesis in collaboration with the Universities of Vienna, Pavia and Milan and 9 final master's projects in Official Master's degrees from the UGR and with a quality mention.

In terms of academic leadership, I served as **Vice-Dean for Research** (2017–2021), fostering interdisciplinary projects and international visibility, and since 2021 and until October 2025 I was **Vice-Dean for Academic Planning**, coordinating curricular innovation and quality assurance while integrating sustainability and internationalization principles into governance.

Part C. RELEVANT MERITS

C.1. Publications

1) Romero-Tamudo S, Carrión MD, Chayah M, Espejo-Román JM, Domene C, Sánchez-Martín RM, Cruz-López O (AC), **Conejo-García A (AC)**. CD44-targeted *N*-benzyltetrahydroisoquinoline derivatives as anticancer agents with high tumor-to-normal cell selectivity. *Eur J Med Chem*. 2025, 298: 118039. **Q1**. https://doi.org/10.1016/j.ejmech.2025.118039

2) Chayah M, Espejo-Román JM, Erviti-Marticorena L, Huertas-Camarasa F, Domene C, Sánchez-Martín RM, **Conejo-García A (AC)**, Cruz-López O (AC). New N-Alkylketonetetrahydroisoquinoline derivatives exhibits antitumor effect by HA-CD44 interaction inhibition in MDA-MB-231 breast cancer. *Bioorg Chem.* **2025**, 156:108212. **D1**. https://doi.org/10.1016/j.bioorg.2025.108212

3) Chayah M, Luque-González MA, Gómez-Pérez V, Salagre D, Al-Shdaifat A, Campos JM, **Conejo-García A (AC),** Agil A (AC). Synthesis and Anti-Diabetic Activity of an 8-Purine Derivative as a Novel DPP-4 Inhibitor in Obese Diabetic Zücker Rats. *Drug Des Devel Ther.* 2024, 18, 1133-1141. **Q1**. https://doi.org/10.2147/DDDT.S450917

4) Espejo-Román JM, Rubio-Ruiz B, Chayah-Ghaddab M, Cruz-López O (AC), **Conejo-García A (AC)** (10/10). *N*-aryltetrahydroisoquinoline derivatives as HA-CD44 interaction inhibitors: Design, synthesis, computational studies, and antitumor effect. *Eur J Med Chem*. 2023, 258: 115570. **Q1** https://doi.org/10.1016/j.ejmech.2023.115570

5) Espejo-Román JM, Rubio-Ruiz B, Cano-Cortés V, Cruz-López O, Gonzalez-Resines S, Domene C, **Conejo-García A (AC)**, Sánchez-Martín RM (AC). Selective Anticancer Therapy Based on a HA-CD44 Interaction Inhibitor Loaded on Polymeric Nanoparticles. *Pharmaceutics*. 2022 14(4):788. **Q1**. https://doi.org/10.3390/pharmaceutics14040788

6) Cruz-López O (AC), Ner M, Nerín-Fonz F, Jiménez-Martínez Y, Araripe D, Marchal JA, Boulaiz H, Gutiérrez-de-Terán H, Campos JM, **Conejo-García A (AC)**. (10/10) Design, synthesis, HER2 inhibition and anticancer evaluation of new substituted 1,5-dihydro-4,1-benzoxazepines. *J Enzyme Inhib Med Chem.* 2021, 36(1), 1553-1563. **Q1**. https://doi.org/10.1080/14756366.2021.1948841

7) Rubio-Ruiz B, Serrán-Aguilera L, Hurtado-Guerrero R (AC), **Conejo-García A (AC)**. Recent advances in the design of choline kinase α inhibitors and the molecular basis of their inhibition. *Med. Res. Rev.* 2020, DOI: 10.1002/med.21746. **D1**. https://doi.org/10.1002/med.21746

8) Brancucci NMB, Gerdt JP, Wang C, Marti M (AC). (18/27) Lysophosphatidylcholine Regulates Sexual Stage Differentiation in the Human Malaria Parasite Plasmodium falciparum. Cell. 2017, 171 (7): 1544.e15. **D1** https://doi.org/10.1016/j.cell.2017.10.020

9) Cruz-López O, Ramírez A, Navarro SA, García MA, Marchal JM, Campos JM, **Conejo-García A (AC)**. 1-(Benzenesulfonyl)-1,5-dihydro-4,1-benzoxazepine as a new scaffold for the design of antitumor compounds. *Future Med Chem*. 2017, 9 (11), 1129-1140. **Q1** https://doi.org/10.4155/fmc-2017-0006

10) Serrán-Aguilera L, Denton H, Rubio-Ruiz B, Smith TK (AC), **Conejo-García A (AC)**, Hurtado-Guerrero R (AC). (8/9). Plasmodium falciparum Choline Kinase Inhibition Leads to a Major Decrease in Phosphatidylethanolamine Causing Parasite Death. *Sci Rep*. 2016, 12;6:33189. **Q1** https://doi.org/10.1038/srep33189

C.2. Research projects

1) Synthesis of lipophenols with anticancer activity from bioactive compounds from food by-products (**Principal Investigator**). Ministry for Ecological Transition and the Demographic Challenge (TED2021-132047B-I00). 2022-2024. 149500 euros

2) Development of a new nanotechnology platform for antitumor therapy based on CD44 inhibition (**Principal Investigator**). Ministry of Science and Innovation (PID2021-128109OB-I00). 2022-2025. 127050 euros

3) Design, synthesis, biological evaluation and targeted release of CD44 inhibitors: a promising antitumor therapy (**Principal Investigator***).* Junta de Andalucía (P18-RT-1679). 2020-2023. 140500 euros

4) Development of a nanotechnology platform for in situ cell reprogramming using peptide nucleic acid based gene editing (Investigator). Junta de Andalucía (P18-TP-4160). 2020-2023. 138575 euros

5) Nano3Devices: Multifunctionalized Nanosystem with Theranostic Application in Cancer (Investigator). Ministry of Science and Innovation and Universities, Carlos III Health Institute (DTS18/ 00121) 2018-2020. 78650 euros

6) Development of a Theranostic Antitumour Nanosystem based on CD44 inhibitors (**Principal Investigator**). UGR Research and Transfer Plan. University of Granada (PR/17/006) 2018-2020. 15000 euros

7) Innovative 5-Fluorouracil *O,N*-Acetals and di- and tri-substituted Purine derivatives as pharmacological tools for the treatment of Cancer Stem Cells (Investigator). Ministry of Science and Innovation, Carlos III Health Institute (10/00592) 2011-2013. 93775 euros

8) Design of Drugs with antiproliferative activity: new improved choline kinase inhibitors (Investigator). Junta de Andalucía (Excellence Project P07-CTS-032190) 2008-2011. 297668 euros

9) New homochiral heterocycles with high added value obtained from ortho-disubstituted benzenes: stereochemistry-antitumour activity binomial (Investigator). Ministry of Health and Consumer Affairs (PI070227) 2008-2010. 136004 euros

10) Design, synthesis and biological studies of novel 1,4-benzoxazepines as antitumour compounds (**Principal Investigator**). European Union (MERG-CT-2005-030616) 2006-2007. 40000 euros.

C.3. Contracts, technological or transfer merits.

1) Campos Rosa, J. M.; **Conejo García, A**.; López Cara, L. C.; Marchal Corrales, J. A.; Boulaiz, H.; Aránega Jiménez, A.; Gallo Mezo, M. A.; Espinosa Úbeda, A.; Rodríguez Serrano, F. Nuevas (*RS*)-7- ó 9-(1,2,3,5-tetrahidro-4,1-benzoxazepin-3-il)-7H ó 9H-purinas con actividad antitumoral. P200802431. España. 13-08-2008. Universidad de Granada.

2) Marchal Corrales, J. A.; Aránega Jiménez, A.; **Conejo García, A.;** García Chaves M.A.; Cruz López, O.; Boulaiz, H.; Rodríguez Serrano, F.; Cativiela Marín, C.; Perán Quesada, M.; Jiménez Sanz, A.I.; García Ruiz, J.M.; Choquesillo Lazarte, D.; Campos Rosa, J.M. Enantiómeros de derivados benzoheteroepínicos y su uso como agentes anticancerígenos P201030415. España. 22-03-2010. Universidad de Granada y Servicio Andaluz de Salud.

3) Conejo García, A.; Entrena, A.; Rubio-Ruiz, B.; Gallo, M.A., Espinosa, A. Inhibidores no simétricos de colina quinasa con actividad antitumoral y antimalárica. 201300033. IPR-413. España. 28-12-2012. Universidad de Granada.

4) Campos Rosa, J.; **Conejo García, A.;** Marchal Corrales, J. A.; Morales Marín, F.; Morata Tarifa, C., Ramírez Rivera, A. Sulfonamidas derivadas de aminas secundarias con grupos 1,3-dioxolanilalquílicos y fenilmetilpurínicos, y su utilización como agentes anticancerígenos P201430048. IPR-524. España. 20-01-2014. Universidad de Granada.