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	MARÍA JOSÉ		
Family name	CAMARASA RIUS		
Gender (*)	FEMALE	Birth date (dd/mm/yyyy)	31/07/1956
Social Security, Passport, ID number	05344883M		
e-mail	mj.camarasa@iqm.csic.es	URL Web: http://www.iqm.csic.es/nucleoside_group/	
Open Researcher and Contributor ID (ORCID) (*)		0000-0002-4978-6468	

(*) Mandatory

A.1. Current position

Position	Research Professor (Full Professor)		
Initial date	27/07/2002		
Institution	Agencia Estatal Consejo Superior de Investigaciones Científicas		
Department/Center	Dpto. de Biomiméticos para el descubrimiento de fármacos	Instituto de Química Médica	
Country	Spain	Teleph. number	+34 912587458
Key words	Medicinal chemistry, antivirals, Leishmanicidals, antitumorals, enzymatic inhibitors, protein-protein interactions, prodrugs, nucleosides, peptides.		

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

Period	Position/Institution/Country/Interruption cause
1979-1982	Predoctoral Fellow / Instituto de Química Médica (IQM)/ Spain
1983	Postdoctoral Fellow / IQM/ Spain
1983-1985	Postdoctoral Fellow / University of Birmingham/ UK
1985-1987	Postdoctoral Fellow Reincorporation (MEC) / IQM /Spain
1987-1993	Tenured Scientist / IQM/ Spain
1991-1994	Head of Chemotherapy Dept. / IQM / Spain
1992-2002	Vice-Director / IQM / Spain
1993-2002	Research Scientist / IQM / Spain
2002-Currently	Research Professor (Full Professor) / IQM / Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Licensed in Chemistry	Complutense de Madrid (UCM)	1973-1978
PhD in Chemistry	Complutense de Madrid (UCM)	1982

(Include all the necessary rows)

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

- Expertise: A long-standing, broad expertise and background in the field of medicinal chemistry, and particularly, in the design, synthesis and optimization of molecules (sugars, nucleosides, heterocycles and peptides) with biological activity, directed against enzymes or targets that play critical roles in the life cycle of different pathogens (virus, parasites, bacteria, etc). **2022** one of the most cited CSIC scientists in the top 2% worldwide of their disciplines.

- Most relevant highlights in her career history: 6 sexenios (last one 2013-2018); Citations: **6285** (Scopus, October 2022), **7340** (Google Scholar); h-index: **39** (SCOPUS), **44** (Google Scholar), i10 index = **150**; PhD Thesis supervised**: 15** PhD thesis (+2 in progress); Publications**: > 240**; **> 160** (Q1);

(> **90** in D1); Patents**: 18** (**4** licensed); More then **50** Invited Lectures in National (**30**) and International forums (**20**). More than **385** communications in National (**161**) and International (**225**) meetings and conferences and many chairs in specialized sessions. Chairman at **14** national and **9** international meetings. President of the organising comitees and/or scientific comitees at **15** international and **25** national meetings.fc

- Research Projects and contracts: Principal Investigator (PI) of several national (private and governmental) and international grants: **32** National Projects (financed by the Plan National, the CAM, FECYT and CSIC). and **13** European Projects (financed by the EU, NATO and COST) as PI (responsible of the Spanish team). Participation in **4** international bilateral agreements and in contracts with national (**1**) and international (**5**) pharmaceutical companies involving around **700.000€** in total.

- Scientific Awards and Recognition: Recipient of several awards and prizes, including two international (UK) prizes. In **2001** she received the highly competitive and prestigous **René Descartes Prize** of the European Commission. Nominated in **2008** to the **L'OREAL-UNESCO Awards 2009 "For Women in Science**" in the field of the physical Sciences.

- Supervision of personnel: Supervisor of **14** PhD thesis (+2 now in progress), **18** postgraduate students (DEAS, Masters), **8** international students (Erasmus+), **4** postdoctoral students.

- Management of Science: From **2021 Board Member** of the Etic Comitee of CSIC; From **2019 Counselor** of Fundación Gadea Ciencia; **2020-2021 Coordinator of New Antivirals** of the CSIC PTI Salud Global platform; from **2021 Board Member** of the CSIC PTI+ platform; **2010-2016** Member of the **Executive Board** of the International Society for Nucleosides, Nucleotides and Nucleic Acids (IS3NA); **2005-2010 Deputy Member** of the Chemistry Area of ANEP (National Evaluation and Foresight Agency)**; 2004-2011 Deputy co-Coordinator** of the Science and Chemical Technologies Area of the CSIC; **2004-2007 President** of the Spanish Society of Therapeutic Chemistry (SEQT); **1992-2002** Vice-Director (IQM-CSIC); **1991-1994** Head of Chemotherapy department (IQM-CSIC).

- Editorial Boards: (a) ***Nucleos, Nucleot and Nucleic Acids*** (since 1998), ***Curr Top Med Chem*** (since 2005), ***ChemMedChem*** (since 2005), ***Current HIV Research*** (2006-2017), ***J Med Chem*** (2013-2016), ***Antiviral Chem Chemother*** (since 2016). **(b)** ***Guest Editor***: of a special issue of ***Curr Top Med Chem*** (2004). **(c)** ***Member by invitation:*** of the panel of "programme of development of the publication" of ***Nature*** (2008-2009); and of the "panel reading survey" of ***Nature*** (2009-2010).

- International and National Evaluation Comitees: (a)- ***Jury member*** of the "EFMC Ehrlich AWARD-2010" of the European Federation of Medicinal Chemistry (EFMC); ***Jury member*** of the "2014 EFMC Prize for a Young Medicinal Chemist in Industry" and of the "2014 EFMC Prize for a Young Medicinal Chemist in Academia" of the EFMC. **(b)-** ***Ad hoc reviewer for grant proposals*** of International Agencies of different countries (FWO, Belgium; KULeuven Proposals, Belgium; AECID, Venezuela, etc). **(c)-** ***Member of the selection comitees*** of different grant applications (Ramón y Cajal, Juan de la Cierva, Fullbright programs and Tenure Track Professorship position at University of Viena). **(d)-** ***Board member of different comissions*** to evaluate the grant applications for projects of Plan Nacional (Spanish funding agency).

Part C. RELEVANT MERITS *(sorted by typology)*

C.1. Publications *(see instructions) (Selected from the last five years 2018-2022)*

1.- S. de Castro, M. Maldonado, A. Stevaert, … L. Naesens (CA). **2022.** A Versatile Class of 1,4,4-Trisubstituted Piperidines Block Coronavirus Replication in vitro. ***Pharmaceuticals*** *15*, 1022. (12/14). PI of the IQM group

2.- M. Alcón-Calderón, H. De Lucio, … A. Jiménez-Ruiz (CA), S. Velázquez (CA). **2022.** Identification of *L. Infantum* trypanothione synthetase inhibitors with leishmanicidal activity from a (non-biased) in-house chemical library. ***Eur. J. Med. Chem.*** *243,* 114675. (10/12). PI of the IQM group

3.- A. Revuelto, I. López-Martín, H. de Lucio, … M.J. Camarasa (CA). **2021.** Small Molecule–Peptide Conjugates as Dimerization Inhibitors of Leishmania infantum Trypanothione Disulfide Reductase. ***Pharmaceuticals*** *14*, 689-703. (10/10).

4.- Revuelto, H. De Lucio, J.C. García-Soriano, … S. Velázquez (CA). **2021.** Highly Efficient Dimerization Disruption of Leishmania infantum Trypanothione Reductase by Triazole-phenylthiazoles. ***J. Med. Chem.*** *64*, 6137-6160. (7/8). PI of the IQM group

5.- M. Ruiz-Santaquiteria, B. M. Illescas, R. Abdelnabi, … M.J. Camarasa (CA), N. Martín (CA). **2021.** Multivalent Tryptophan- and Tyrosine-Containing [60]Fullerene Hexa-Adducts as Dual HIV and Ev71 Entry Inhibitors. ***Chem. A Eur. Journal****, 27,* 10700-10710. (12/13).

6.- F.J. Luque, M.J. Camarasa (CA). **2021.** HIV-1 Envelope Spike MPER: From a Vaccine Target to a New Druggable Pocket for Novel and Effective Fusion Inhibitors. ***ChemMedChem***. *16*, 105-107. (2/2).

7.- S. de Castro, T. Ginex, E. Vanderlinden, …S. Velázquez (CA). **2020.** *N*-benzyl 4,4-disubstituted piperidines as a potent class of influenza H1N1 virus inhibitors showing a novel mechanism of hemagglutinin fusion peptide interaction. ***Eur. J. Med. Chem***. *194*, 112223**.** (8/11). PI of the IQM group

8.- P.A. Sánchez-Murcia, S. de Castro, C. García-Aparicio, … M.J. Camarasa (CA). **2020.** Peptides Derived from the β7/β8 loop of HIV-1 Reverse Transcriptase p51 Subunit as "Hotspot-Targeted" Dimerization Inhibitors. *ACS Med. Chem. Lett. 11,* 811-817 (11/11).

9.- S. de Castro, C. Ferrer-Orta, A. Mills, … M.J. Camarasa (CA). **2019.** (F)uridylylated Peptides Linked to VPg1 of Foot-and- Mouth Disease Virus (FMDV): Design, Synthesis and X-Ray Crystallography of the Complexes with FMDV RNA-dependent RNA polymerase. *Molecules 24*, 2360-2374 (7/7).

10.- J. Fernández-Lucas, M.J. Camarasa (Eds). **2019.** Enzymatic and Chemical synthesis of nucleic acid derivatives. Willey-VCH Verlag Gmbh & Co. KGaA, Boschstr. 12, 69469, Weinheim, Germany. Print ISBN: 978-3-527-34376-8. (2/2).

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

1.- M.J. Camarasa. *Discovery of a novel and unique type of hemagglutinin (HA) inhibitors of influenza virus (H1N1)*. REARBOVIR Workshop. Madrid 19-20/02/2019. Invited Conference

2.- M.J. Camarasa. *Peptide prodrugs based on the DPPIV/CD26 enzyme. A new prodrug approach.* 2ND Iberic Meeting on Medicinal Chemistry: G protein-Coupled Receptors and Enzymes in Drug Discovery. Porto (Portugal). 12-15/06/2011. Invited Conference (Plenary Lecture)

3.- M.J. Camarasa. *Strategies for the design and discovery of compounds directed against challenging targets of HIV-1 life cycle.* XXIInd EFMC-International Symposium on Medicinal Chemistry. Berlín (Alemania). 2-6/09/2012. Invited Conference

4.- M.J. Camarasa. *A Prodrug Approach Based on The DPPIV/CD-26 Enzyme.* 3RD National Meeting on Medicinal Chemistry. 3º Encontro Nacional de Química Terapéutica. Aveiro (Portugal) 28-30/11/2012. Invited Conference

5.- M.J. Camarasa. *Two challenging strategies for the design and discovery of HIV-replication inhibitors*. V EWDSY. European Workshop in Drug Discovery. Certosa di Pontignano, Siena (Italia) 18-23/05/2014. Invited Conference (Plenary Lecture)

6.- M.J. Camarasa. *Gp120 as a target for the design and discovery of HIH-entry/Fusion inhibitor*. 2Nd IAAASS. Innovative Approaches for Identification of Antiviral Agents Summer School. Santa Margherita di Pula, Sardinia (Italia) 28-07-3-08/2014. Invited Conference

7.- M.J. Camarasa. *DPPIV/CD-26 enzyme-mediated activation of amide prodrugs*. VI EWDSY. Sixth European workshop in drug discovery. Certosa di Pontignano, Siena (Italia) 15-18/05/2016. Invited Conference

8.- M.J. Camarasa. *New molecular entities as inhibitors of HBV and (re)emerging virus replication.* MUTALIG COST Action CA15135. Second WG Meeting 2018. Tenerife. 15-16/03/2018. Invited Conference (Plenary Lecture)

C.3. Research projects (*Selected from **2012-2022***), indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.

1.- *Nuevas entidades químicas como herramientas farmacológicas frente a la Leishmaniasis e infecciones (re)emergentes por virus RNA* (LEISHVIR) (Coordinated Project). Programa estatal de I+D+i Orientada a los Retos de la Sociedad, **Ref.** PID2019-104070RB-C21. 06/**2020**–05/**2023**. Coordinator: ***M.J. Camarasa*. 314.600 €.**

2.- *Herramientas terapeúticas innovadoras frente a la leishmaniasis*. CSIC (Proyectos intramurales Especiales) **Ref.** CSIC-PIE-201980E028. 02/**2019**-01/**2023**. PI: S. Velázquez. Co-PI: ***M.J. Camarasa*. 120.060 €.**

3.- *BlockAce / Multidisciplinary approach to blocking SARS-CoV2 entry through antivirals and Decoy-ACE2 fragments*. Acrónimo: BlockAce. Santander FONDO SUPERA COVID 19. 06/**2020**-12/**2022**. Coordinator: Ron Geller. Researcher and PI IQM-CSIC: ***M.J. Camarasa***. **150.00€**

4.- *Characterization and blocking through peptides and small molecules of target proteins involved in the proliferation of pathogen microorganisms and cáncer cells* (Coordinated Project). MINECO/Plan Nacional (Programa Biomedicina) **Ref.** SAF2015-64629-C2-1-R. 01/**2016**–12/**2019**. Coordinator**:** ***M.J. Camarasa*. 302.500 €.**

5.- *Multitarget paradigm for innovative ligand identification in the drug discovery process (MuTaLig)*. European Union COST H2020 Actions, **Ref.** COST CA15235 MuTaLig. 04/**2016** – 04/**2020**. Coordinator: S. Alcaro (University of Catanzaro, Italy). PI IQM-CSIC: ***M.J. Camarasa***.

6.- *Integration of strategies for the design and discovery of ligands with affinity for challenging targets of therapeutic interest in highly prevalent (AIDS OR CANCER) or neglected (LEISHMANIASIS) diseases*. (Coordinated Project). MINECO/Plan Nacional (Programa Biomedicina) **Ref.** SAF2012-39760-C02. 02/**2013**-12/**2016**. Coordinator: ***M.J. Camarasa***. **327.000 €.**

7.- *BIPEDD-2. Bioinformatics Integrative Platform for structurE-based Drug Discovery 2.* Comunidad de Madrid-CAM- Programa de actividades de I+D entre grupos de Investigación (Edición Biociencias) **Ref.** P2010/BMD-2457. 01/**2012**-04/**2016**. Coordinator: F. Gago (UAH). PI IQM-CSIC: ***M.J. Camarasa***. **115.430 €**.

8.- *Chemotherapeutic agents against widespread pathogens (HIV AND LEISHMANIA): Exploring novel targets and/or new mechanisms of inhibition.* (Coordinated Project). MICINN/Plan Nacional (Programa Biomedicina) **Ref.** SAF2009-13914-C02. 01/**2010**-12/**2013**. Coordinator**:** ***M.J. Camarasa*. 442.860 €.**

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

1.- *Novel inhibitors against LD-transpeptidases in Gram-negative multi-drug resistant pathogens*. EU iNEXT (**PID:5834**). 07-**2018**-07-**2020.** J. Hermoso (Coordinator). ***M.J. Camarasa*:** PI IQM-CSIC.

2.- *Desarrollo de compuestos para la regulación de la actividad del coactivador transcripcional p300 en patologías tumorales, inflamatorias, infecciosas o autoinmunes. Papel del sitio de fosforilación de la serina 384 (Ser384) por PKC-θ como diana utilizada por el inhibidor viral A238L* (Coordinated Project**)**. FECYT (former Genoma España). 07-**2011**-12-**2015**. Y. Revilla (Coordinator). ***M.J. Camarasa***: PI IQM-CSIC. **70.000 €**.

3.- *CBA Project: Design, synthesis and structural characterization of organic molecules.* KU Leuven Research and Development, **Ref: 02040490001.** 01-**2009**-12-**2016**. M.J. Pérez-Pérez and ***M.J. Camarasa*** (PIs). **421.337,23 €.**

4.- *MTA (Material transfer Agreement)* between GlaxoSmithKline, CSIC and Universidad de Alcalá. 06-**2020** (3 years). S. Velázquez and ***M.J. Camarasa*** (PIs).

5.- *Research and collaboration Agreement* between CSIC, K. U. Leuven, The Scripps Research Institute, University of Barcelona, University of Istambul. 02-**2020** (3 years). S. Velázquez and ***M.J. Camarasa*** (PIs).

Patents

1.- M.J. Camarasa, S. Velázquez, A. Revuelto, A. Jiménez-Ruiz, F. Gago, H. De Lucio, P. A. Sánchez-Murcia, M. A. Toro. *Triazole-phenyl-thiazole heterocycles as innovative inhibitors of trypanothione reductase and their use as leishmanicides.* EP17382868 (**PCT/EP2018/086174**). Priority: 20-12-2017. Owners: CSIC-UAH.

2.- J. Balzarini, M.J. Camarasa, S. Velázquez. *Compositions for the treatment or prophylaxis of viral infections*. USA patent 14/547,988. Priority*:* USA. 09-11-2014. Owners: CSIC-KULeuven (Belgium).

3.- J. Balzarini, M.J. Camarasa, S. Velázquez. *New nucleoside compounds useful in the manufacture of a medicament for the prophylaxis or treatment of viral infections caused by varicella zoster virus, e.g. chicken pox or shingles*. 0717526.8 (**WO2009030410- A1**). Priority countries: UK (GB2452556-A), Taiwan (TW200927147-A), Pakistán (33689-502001PK). Priority: 12-03-2012. Owners: CSIC-KULeuven (Belgium). **Licensed to Fermavir (USA).**