CV Date	

Part A. PERSONAL INFORMATION

First Name *	Vanessa		
Family Name *	Soto Cerrato		
Sex *	Female	Date of Birth *	
ID number Social Security, Passport *		Phone Number *	(+34) 934031140
URL Web			
Email Address	vsoto@ub.edu		
Researcher's identification number	Open Researcher and Contributor ID (ORCID) *	0000-0001-5835-3595	
	Researcher ID		
	Scopus Author ID	9634118400	

* Mandatory

A.1. Current position

Job Title	Profesora Agregada/Associate Professor		
Starting date	2018		
Institution	Universitat de Barcelona		
Department / Centre	Facultad de Medicina y Ciencias de la Salud / Departamento de Patología y Terapéutica Experimental - Bellvitge		
Country		Phone Number	
Keywords	240700 - Cell biology		

A.2. Previous positions

Period	Job Title / Name of Employer / Country
2018 - 2018	Profesor Asociado/Assistant Professor / Universitat de Barcelona
2014 - 2018	Profesor Lector/Tenure-track Professor / Universitat de Barcelona
2010 - 2013	Investigador postdoctoral/Postdoctoral Researcher / Universitat de Barcelona
2010 - 2010	Investigador/Researcher / Omnia Molecular S.L.
2008 - 2010	Investigador Senior/Senior Researcher / Centro de Investigación y Desarrollo Farmacéutico. Ferrer Internacional
2004 - 2008	Profesor Ayudante/Assistant Professor / Universitat de Barcelona
2002 - 2004	Profesor Asociado/Assistant Professor / Universitat de Barcelona
2000 - 2001	Investigador en formación/Researcher in training / Institute of Molecular Biology
1998 - 2000	Investigador en formación/Researcher in training / Universitat de Barcelona

A.3. Education

Degree/Master/PhD	University / Country	Year
Doctorado en Biología y patología celulares/PhD in Biology and Cellular Pathology	Universitat de Barcelona / Spain	2007
Máster en Ciencias Experimentales Biomédicas/MSc in Experimental Biomedical Sciences	Universitat de Barcelona / Spain	2003
Llicenciatura de Biologia/BSc in Biology	Universitat de Barcelona / Spain	2001

A.4. General quality indicators of scientific production
Total Research Publications: 45 papers (10 D1, 25 Q1, 10 Q2)
Corresponding Author: 8 papers (1 D1, 5 Q1, 2 Q2); **1st author:** 5 papers (4 Q1, 1 D1)
H-Index: 27; **Total Citations:** 1912 (Scopus, 16th October 2023)
Total Impact Factor: 237; **Average Impact Factor:** 5.27
Competitive R+D Projects: 16 (2 IP or co-IP); **Non-Competitive R+D Projects:** 3 (3 IP)
Patents: 3; **Congress Contributions:** 69
Competitive Fellows granted: Sara Borrell (CD08/00048), Torres Quevedo (PTQ-08-02-07303)
PhD supervision: 4 (+1 in progress)
BSc Project and MSc Project supervision: 17
Research acreditation (sexenios ANECA): 3

Part C. RELEVANT ACCOMPLISHMENTS

C.1. Publications

AC: corresponding author. (nº x / nº y): position / total authors. If applicable, indicate the number of citations

1 **Scientific paper**. Alonso-Carrillo, D.; Arias-Betancur, A.; Carreira-Barral, I.; Fontova, P.; Soto-Cerrato, V.; García-Valverde, M.; Pérez-Tomás, R.; Quesada, R.2023. Small molecule anion carriers facilitate lactate transport in model liposomes and cells. iScience. https://doi.org/10.1016/j.isci.2023.107898
2 **Scientific paper**. Herrera-Ramírez, P.; Alina Berger, S.; Josa, D.; et al; Gamez, P.; (7/9) Soto-Cerrato, V.2023. Steric hindrance, ligand ejection and associated photocytotoxic properties of ruthenium(II) polypyridyl complexes. Journal of Biological Inorganic Chemistry.
3 **Scientific paper**. Josa, D.; Aguilà, D.; Fontova, P.; Soto-Cerrato, V.; Herrera-Ramírez, P.; Rafols L.; Grabulosa, A.; Gamez, P.2023. Cytotoxicity of osmium(ii) and cycloosmated half-sandwich complexes from 1-pyrenyl-containing phosphane ligands. Dalton Transactions. 52-24, pp.8391-8401. https://doi.org/10.1039/D3DT00743J
4 **Scientific paper**. Espona-Fiedler, M.; Manuel-Manresa, P.; Benítez-García, C.; Fontova, P.; Quesada, R.; Soto-Cerrato, V. (AC); Pérez-Tomás, R.2022. Antimetastatic Properties of Prodigiosin and the BH3-Mimetic Obatoclax (GX15-070) in Melanoma. Pharmaceutics. https://doi.org/10.3390/pharmaceutics15010097
5 **Scientific paper**. Molero-Valenzuela A; Fontova P; Alonso-Carrillo D; et al; (10/10) Soto-Cerrato V. (AC). 2022. A novel late-stage autophagy inhibitor that efficiently targets lysosomes inducing potent cytotoxic and sensitizing effects in lung cancer. Cancers.
6 **Scientific paper**. Rafols,L; Josa, D.; Aguilà, D.; et al; Gamez, P-; (7/11) Soto-Cerrato, V.2021. Piano-Stool Ruthenium(II) Complexes with Delayed Cytotoxic Activity: Origin of the Lag Time. Inorganic Chemistry. https://doi.org/10.1021/acs.inorgchem.1c00507
7 **Scientific paper**. Pérez-Hernández, M.; Cuscó, C.; Benítez-García, C.; et al; Pérez-Tomás, R.; (13/14) Soto-Cerrato, V.2021. Multi-smart and scalable bioligands-free nanomedical platform for intratumorally targeted tambjamine delivery, a difficult to administrate highly cytotoxic drug. Biomedicines. https://doi.org/10.3390/biomedicines9050508
8 **Scientific paper**. Rafols, Laia; Torrente, Sara; Aguila, David; Soto-Cerrato, Vanessa; Perez-Tomas, Ricardo; Gamez, Patrick; Grabulosa, Arnald. 2020. Expanding the Range of Pyrenylphosphines and Their Derived Ru(II)-Arene Complexes. Organometallics. 39-16, pp.2959-2971. https://doi.org/10.1021/acs.organomet.0c00302
9 **Scientific paper**. Lahiguera, A.; Hyrossová, P.; Figueras, A.; et al; Viñals, F.; (6/25) Soto-Cerrato, V.2020. Tumors defective in homologous recombination rely on oxidative metabolism: relevance to treatments with PARP inhibitors. EMBO Molecular Medicine. https://doi.org/10.15252/emmm.201911217

10 **Scientific paper**. Carreira-Barral, I.; Mielczarek, M.; Alonso-Carrillo, D.; Capurro, V.; Soto-Cerrato, V.; Pérez Tomás, R.; Caci, E.; García-Valverde, M. and Quesada, R.2020. Click-tambjamines as efficient and tunable bioactive anion transporters. Chemical Communications. 56-21, pp.3218-3221. https://doi.org/10.1039/D0CC00643B

11 **Scientific paper**. Censi, V.; Caballero, A.B.; Pérez-Hernández, M.; et al; Gámez, P.; (4/9) Soto-Cerrato, V.2019. DNA-binding and in vitro cytotoxic activity of platinum(II) complexes of curcumin and caffeine. Journal of Inorganic Biochemistry. Elsevier B.V.. 198-110749. ISSN 0162-0134. https://doi.org/10.1016/j.jinorgbio.2019.110749

12 **Scientific paper**. Martínez-García, D.; Pérez-Hernández, M.; Korrodi-Gregório, L.; Quesada, R.; Ramos, R.; Baixeras, N.; Pérez-Tomás, R.; Soto-Cerrato, V. (AC). 2019. The Natural-Based Antitumor Compound T21 Decreases Survivin Levels through Potent STAT3 Inhibition in Lung Cancer Models. Biomolecules. 9-361. ISSN 2218-273X. https://doi.org/10.3390/biom9080361

13 **Scientific paper**. Hernando, E.; Capurro, V.; Cossu, C.; et al; Quesada, R.; (6/10) Soto-Cerrato, V.2018. Small molecule anionophores promote transmembrane anion permeation matching CFTR activity. Scientific Reports. Nature Publishing Group. 8. ISSN 2045-2322. https://doi.org/10.1038/s41598-018-20708-3

14 **Scientific paper**. Kotev, M.; Manuel-Manresa, P.; Hernando, E.; Soto-Cerrato, V. (AC); Orozco, M.; Quesada, R.; Pérez-Tomás, R.; Guallar, V.2017. Inhibition of human enhancer of zeste homolog 2 with tambjamine analogs.Journal of Chemical Information and Modeling. American Chemical Society. 57, pp.2089-2098. ISSN 1549-9596. https://doi.org/10.1021/acs.jcim.7b00178

15 **Scientific paper**. Manuel-Manresa, P.; Korrodi-Gregório, L.; Hernando, E.; et al; Perez-Tomas, R.; (11/12) Soto-Cerrato, V. (AC). 2017. Novel indole-based tambjamine-analogues induce apoptotic lung cancer cell death through p38 mitogen-activated protein kinase activation.Molecular Cancer Therapeutics. American Association for Cancer Research. ISSN 1535-7163. https://doi.org/10.1158/1535-7163.MCT-16-0752

16 **Scientific paper**. Rodilla, A. M.; Korrodi-Gregório, L.; Hernando, E.; Manuel-Manresa, P.; Quesada, R.; Pérez-Tomás, R.; Soto-Cerrato, V. (AC). 2017. Synthetic tambjamine analogues induce mitochondrial swelling and lysosomal dysfunction leading to autophagy blockade and cell death in lung cancer. Biochemical Pharmacology. Elsevier B.V.. 126-2017, pp.23-33. ISSN 0006-2952. https://doi.org/10.1016/j.bcp.2016.11.022

17 **Scientific paper**. Wu, X.; Judd, L.W.; Howe, E.N.W.; et al; Gale, P.A.; (5/13) Soto-Cerrato, V.2016. Nonprotonophoric electrogenic Cl− transport mediated by valinomycin-like carriers. Chem. Cell Press. 1, pp.127-146. ISSN 2451-9294. https://doi.org/10.1016/j.chempr.2016.04.002

18 **Scientific paper**. Soto-Cerrato, V.; Manuel-Manresa, P.; Hernando, E.; et al; Quesada, R.2015. Facilitated anion transport induces hyperpolarization of the cell membrane that triggers differentiation and cell death in cancer stem cells. Journal of the American Chemical Society. American Chemical Society. 137-50, pp.15892-15898. ISSN 0002-7863.

19 **Bibliographic review**. Pérez-Hernández, M.; Arias, A.; Martínez-García, D.; Pérez-Tomás, R.; Quesada, R.; Soto-Cerrato, V. (AC). 2019. Targeting autophagy for cancer treatment and tumor chemosensitization. Cancers. MDPI. 11-10, pp.1599. ISSN 2072-6694. https://doi.org/10.3390/cancers11101599

20 **Bibliographic review**. Martínez-García, D.; Manero-Rupérez, N.; Quesada, R.; Korrodi-Gregório, L.; Soto-Cerrato, V. (AC). 2018. Therapeutic strategies involving survivin inhibition in cancer.Medicinal Research Reviews. Wiley. ISSN 0198-6325. https://doi.org/10.1002/med.21547

C.3. Research projects and contracts

1 **Project**. PI22/00256, Desarrollo de estrategias terapéuticas para disminuir la resistencia a tratamientos convencionales en cáncer de pulmón/Development of therapeutic strategies to overcome resistance to conventional treatments in lung cancer. Vanessa Soto Cerrato. (FUNDACION PRIVADA INSTITUT D'INVESTIGACIO BIOMEDICA DE BELLVITGE (IDIBELL)). 01/01/2023-31/12/2025. 141.570 €. Principal investigator.

2 **Project**. 2021 SGR 00184, Genètica, teràpia i resistència en tumors epitelials i germinals/Genetics, therapy and resistance in epithelial and germ tumors. Agència de Gestió d'Ajuts Universitaris i de Recerca (AGAUR). Francesc Viñals Canals. (Institut d'Investigació Biomèdica de Bellvitge IDIBELL). 01/01/2022-31/12/2024. 60.000 €. Team member.

3 **Project**. BU067P20, Molecular tools targeting cellular metabolism for cancer therapy. Junta de Castilla y León. Roberto Quesada Pato. (University of Burgos). 01/11/2020-30/10/2023. 264.000 €. Team member.

4 **Project**. PI18/00441, Evaluación terapéutica preclínica en cáncer de pulmón de inhibidores de survivina mediante la utilización de formulaciones nanoencapsuladas y terapias combinadas/Preclinical therapeutic evaluation of survivin inhibitors in lung cancer through the use of nanoencapsulated formulations and combined therapies. Ministerio de Economia y Competitividad. Ricardo Enrique Perez Tomas; Vanessa Soto Cerrato. (Universitat de Barcelona). 01/01/2019-31/12/2021. 87.120 €. co-Principal Investigator.

5 **Project**. 2017SGR449, Genètica, teràpia i resistència en tumors epitelials i germinals/Genetics, therapy and resistance in epithelial and germ tumors. Agència de Gestió d'Ajuts Universitaris i de Recerca (AGAUR). Francesc Viñals Canals. (Institut d'Investigació Biomèdica de Bellvitge IDIBELL). 01/01/2017-30/09/2021. 35.200 €. Team member.

6 **Project**. BU092U16, Nuevos nano-transportadores para la administración selectiva de fármacos antitumorales/New nano-transporters for the selective administration of antitumor drugs. Junta de Castilla y León. Roberto Quesada Pato. (UB-UBUR). 01/06/2016-31/12/2018. 120.000 €. Team member.

7 **Project**. PI13/00089, Estudio preclínico y traslacional de nuevos agentes anticancerosos derivados de tambjaminas para el tratamiento del cáncer de pulmón humano/Preclinical and translational study of new anticancer agents derived from tambjamines for the treatment of human lung cancer. Ministerio de Economia y Competitividad. Ricardo Enrique Perez Tomas. (Institut d'Investigació Biomèdica de Bellvitge IDIBELL). 01/01/2014-31/12/2016. 57.500 €. Team member.

8 **Project**. 20132730, Transportadors d'anions com eficients molècules desreguladores del pH: Un estudi preclínic i translacional/Anion transporters as efficient pH-regulating molecules: A preclinical and translational study. Fundació La Marató de TV3. Ricardo Enrique Perez Tomas. (Universitat de Barcelona). 01/01/2014-31/12/2016. 221.625 €. Team member.

9 **Contract**. Estudio preclínico preliminar de un nuevo inhibidor de survivina para el tratamiento del cáncer de pulmón /Preliminary preclinical study of a new survivin inhibitor for the treatment of lung cancer EBT Nostrum Biodiscovery, S.L.. Vanessa Soto Cerrato. (Universitat de Barcelona). 01/05/2021-01/05/2023. 30.748 €.

10 **Contract**. Preparació i aplicació de nanocàpsules intel·ligents i potencialment escalables en la teràpia de càncers d'alt impact /Preparation and application of intelligent and potentially scalable nanocapsules in high impact cancer therapy Ecopol Tech, S.L.. Vanessa Soto Cerrato; Ricardo Enrique Perez Tomas. (Universitat de Barcelona). 02/09/2019-31/01/2021. 41.000 €.

C.4. Activities of technology / knowledge transfer and results exploitation

1 **Patent of invention**. Quesada Pato, Roberto; García Valverde, María; Carreira Barral, Israel; Fontova Pale, Pere; Alonso Carrillo, Daniel; Pérez Tomás, Ricardo Enrique; Soto Cerrato, Vanessa; Arias Betancur, Alain. ES202330370. Compuesto que tiene actividad transportadora de lactato /Compound that has lactate transporting activity Spain. 11/05/2023. Universitat de Barcelona, Universidad de Burgos, Institut d'Investigació Biomèdica de Bellvitge IDIBELL.

2 **Patent of invention**. Soto Cerrato, Vanessa; Luis Korrodi Mineiro Marques Gregório; Martínez García, David; Pérez Tomás, Ricardo Enrique; Soliva Soliva, Robert; Guallar Tasies, Víctor; Díaz Bueno, Lucía; Quesada Pato, Roberto; García Valverde, María. PCT/EP2022/071374. Asenapine for use in cancer Spain. 29/07/2022. Institut d'Investigació Biomèdica de Bellvitge IDIBELL.