CV Date	07/10/2025

Part A. PERSONAL INFORMATION

First Name	Cristina		
Family Name	Sánchez García		
Sex	Female	Date of Birth	21/10/1971
ID number Social Security, Passport	52473506H		
URL Web	http://cannabinoidsignalling.com		
Email Address	macsanch@ucm.es		
Open Researcher and Contributor ID (ORCID)	0000-0002-1428-3078		

A.1. Current position

Job Title	Full Professor (Catedrática de Universidad)		
Starting date	2024		
Institution	Complutense University		
Department / Centre	Biochemistry and Molecular Biology / School of Biology		
Country		Phone Number	
Keywords	230200 - Biochemistry		

Part C. RELEVANT ACCOMPLISHMENTS

C.1. Most important publications in national or international peer-reviewed journals, books and conferences

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

1 **Scientific paper**. Isabel Tundidor; Marta Seijo-Vila; Sandra Blasco-Benito; et al; Eduardo Pérez-Gómez; (9/10) Cristina Sánchez (AC). 2024. Fatty acid amide hydrolase drives adult mammary gland development by promoting luminal cell differentiation. Cell Death & Discovery. Springer Nature. 10-12, pp.1-12. https://doi.org/10.1038/s41420-023-01788-1

2 **Scientific paper**. Nuria G Martínez-Illescas; Silvia Leal; Patricia González; et al; Maria Salazar-Roa; (19/21) Cristina Sánchez (AC). 2023. miR-203 drives breast cancer cell differentiation. Breast Cancer Research. Springer Nature. 25-91, pp.1-21. https://doi.org/10.1186/s13058-023-01690-9

3 **Scientific paper**. Gambacorta, Nicola; Gasperi, Valeria; Guzzo, Tatiana; et al; Maccarrone, Mauro; (6/12) Sánchez, Cristina. 2023. Exploring the 1,3-benzoxazine chemotype for cannabinoid receptor 2 as a promising anti-cancer therapeutic. European Journal of Medicinal Chemistry. pp.115647-115647. ISSN 0223-5234. https://doi.org/10.1016/j.ejmech.2023.115647

4 **Scientific paper**. Carlos Costas-Insua; Marta Seijo-Vila; Cristina Blázquez; et al; Manuel Guzmán; (8/10) Cristina Sánchez. 2023. Neuronal Cannabinoid CB1 Receptors Suppress the Growth of Melanoma Brain Metastases by Inhibiting Glutamatergic Signalling. Cancers (Basel). 15-9, pp.2439-2458. https://doi.org/10.3390/cancers15092439

5 **Scientific paper**. Isabel Tundidor; Marta Seijo-Vila; Sandra Blasco-Benito; et al; Eduardo Pérez-Gómez; (24/25) Cristina Sánchez (AC). 2023. Identification of fatty acid amide hydrolase as a new metastasis suppressor in breast cancer. Nature Communications. 14-1, pp.3130-3145. https://doi.org/10.1038/s41467-023-38750-9

6 **Scientific paper**. C Pinto-Díez; R Ferreras-Martín; R Carrión-Marchante; et al; Elena Martín; (14/17) Cristina Sánchez. 2022. An optimized MNK1b aptamer, apMNKQ2, and its potential use as a therapeutic agent in breast cancer. Molecular Therapy-Nucelic Acids. Cell Press. In press. https://doi.org/10.1016/j.omtn.2022.11.009

7 **Scientific paper**. Juan Antonio Méndez-Líter; Ana Pozo-Rodríguez; Enrique Madruga; et al; María Jesús Martínez; (7/10) Cristina Sánchez. 2022. Glycosylation of epigallocatechin gallate by engineered glycosyde hydrolases from Talaromyces amestolkiae: antiproliferative and neuroprotective properties of the novel glycosides. Antioxidants. MDPI. 7, pp.1325-1340. https://doi.org/10.3390/antiox11071325

8 **Scientific paper**. Juan Antonio Méndez-Líter; Isabel Tundidor; Manuel Nieto-Domínguez; et al; María Jesús Martínez; (10/11) Cristina Sánchez. 2019. Transglycosylation products generated by Talaromyces amestolkiae GH3 β-glucosidases: Effect of hydroxytyrosol, vanillin and its glucosides on breast cancer cells. Microbial Cell Factories. Springer Nature. 18-97, pp.1-12. https://doi.org/10.1186/s12934-019-1147-4

9 **Scientific paper**. Sandra Blasco-Benito; Estefanía Moreno; Marta Seijo-Vila; et al; (23/23) Complutense University (AC). 2019. Therapeutic targeting of HER2-CB2R heteromers in HER2-positive breast cancer. Proc Natl Acad Sci USA. 116-9, pp.3863-3872. https://doi.org/10.1073/pnas.1815034116

10 **Scientific paper**. Sandra Blasco-Benito; Marta Seijo-Vila; Miriam Caro-Villalobos; et al; (12/12) Cristina Sánchez (AC). 2018. Appraising the "entourage effect": Antitumor action of a pure cannabinoid versus a botanical drug preparation in preclinical models of breast cancer. Biochemical Pharmacology. 157, pp.285-293. https://doi.org/10.1016/j.bcp.2018.06.025

11 **Scientific paper**. Javier Díaz-Alonso; Adán de Salas-Quiroga; Juan Paraíso-Luna; et al; Ismael Galve-Roperh; (8/11) Cristina Sánchez. 2017. Loss of cannabinoid CB1 receptors induces cortical migration malformations and increases seizure susceptibility. Cerebral Cortex. 27, pp.5303-5317. https://doi.org/10.1093/cercor/bhw309

12 **Scientific paper**. Ibrahim Alkatout; F Hubner; Antonia Wenners; et al; Wolfram Klapper; (6/10) Cristina Sánchez. 2017. In situ localization of tumor cells associated with the epithelial-mesenchymal transition marker Snail and the prognostic impact of lymphocytes in the tumor microenvironment in invasive ductal breast cancer. Experimental and Molecular Pathology. 102, pp.268-275. https://doi.org/10.1016/j.yexmp.2017.02.013

13 **Scientific paper**. Clara Andradas; Sandra Blasco-Benito; Sonia Castillo-Lluva; et al; (24/24) Cristina Sánchez (AC). 2016. Activation of the orphan receptor GPR55 by lysophosphatidylinositol promotes metastasis in triple-negative breast cancer. Oncotarget. 7, pp.47565-47575. https://doi.org/10.18632/oncotarget.10206

14 **Scientific paper**. Manuel Guzman; (2/3) Cristina Sanchez; Guillermo Velasco. 2016. Anticancer mechanisms of cannabinoids. Current Oncology. 23, pp.23-32. ISSN 1198-0052. https://doi.org/10.3747/co.23.3080

15 **Scientific paper**. Nagore Marin Ramos; D ALONSO; SILVIA ORTEGA GUTIERREZ; et al; MARIA LUZ LOPEZ RODRIGUEZ; (14/16) MARIA CRISTINA SANCHEZ GARCIA. 2015. New inhibitors of angiogenesis with antitumor activity in vivo. Journal of Medicinal Chemistry. 58, pp.3757-3766. ISSN 0259-9791. https://doi.org/10.1021/jm5019252

16 **Scientific paper**. Jaime Tome-Amat; MIRIAM OLOMBRADA SACRISTAN; Javier Ruiz de la Herrán; et al; FRANCISCO JAVIER LACADENA GARCIA-GALLO; (6/10) MARIA CRISTINA SANCHEZ GARCIA. 2015. Efficient in vivo antitumor effect of animmunotoxin based on ribotoxin -sarcin in nudemice bearing human colorectal cancer xenografts.SpringerPlus (Medicine). 4, pp.168. https://doi.org/10.1186/s40064-015-0943-5

17 **Scientific paper**. Paula Morales; SANDRA BLASCO BENITO; CLARA ANDRADAS ARIAS; et al; NADINE JAGEROVIC; (8/9) MARIA CRISTINA SANCHEZ GARCIA (AC). 2015. Selective, non-toxic CB2 cannabinoid o-quinone with in vivo activity against triple negative breast cancer. Journal of Medicinal Chemistry. 58, pp.2256-2264. ISSN 0022-2623. https://doi.org/10.1021/acs.jmedchem.5b00078

18 **Scientific paper**. Eduardo Pérez-Gómez; MARTA ELENA ARTOLA PEREZ DE AZANZA; CLARA ANDRADAS ARIAS; et al; (30/30) MARIA CRISTINA SANCHEZ GARCIA (AC). 2015. Cannabinoid receptor CB2 drives HER2 pro-oncogenic signaling in breast cancer. Journal of the National Cancer Institute. 107, pp.djv077. ISSN 0027-8874. https://doi.org/10.1093/jnci/djv077

C.3. Research projects and contracts

1 **Project**. El sistema endocannabinoide en el microambiente tumoral: papel en la progresión y respuesta a inmunoterapia en cáncer de mama. Instituto de Salud Carlos III (FIS). (Universidad Complutense de Madrid). 01/01/2024-31/12/2026. 265.000 €. Principal investigator.

2 **Project**. Potencial del sistema endocannabinoide como diana terapéutica y herramienta de cribado en cáncer de mama. CENTRO DE ACUSTICA APLICADA Y EVALUACION NO DESTRUCTIVA; Instituto de Salud Carlos III. (Universidad Complutense de Madrid). 01/01/2021-31/12/2023. 220.220 €. Principal investigator.

3 **Project**. Los heterómeros HER2-CB2 como diana terapéutica y herramienta pronóstico/predictiva en cáncer de mama HER2 positivo. Cristina Sánchez García. (Universidad Complutense de Madrid). 01/01/2018-31/12/2020. 129.470 €.

4 **Project**. Comparación de la eficacia antitumoral de cannabinoides aislados frente a preparados completos de la planta. FUNDACION CIENTIFICA ASOCIACION ESPAÑOLA CONTRA EL CANCER. Cristina Sánchez García. (Universidad Complutense de Madrid). 01/10/2017-30/09/2018. 20.000 €.

5 **Project**. El sistema endocannabinoide en cáncer de mama HER2+: papel en la generación y progresión tumorales, y potencial como diana terapéutica ymarcador pronóstico. Ministerio de Economía y Competitividad (ISCIII). MARIA CRISTINA SANCHEZ GARCIA. (Universidad Complutense de Madrid). 01/01/2015-31/12/2017. 140.965 €. Principal investigator.

6 **Project**. Análisis del efecto antitumoral de la combinación de terapias anti-Her2 y cannabinoides en cáncer de mama HER2 positivo. Fundación Sandra Ibarra. MARIA CRISTINA SANCHEZ GARCIA. (Universidad Complutense de Madrid). 01/10/2014-30/09/2015. 20.000 €. Principal investigator.

7 **Project**. Papel del receptor huérfano GPR55 en la patogénesis del cáncer: potencial como nuevobiomarcador y diana terapéutica en oncología. Ministerio de Ciencia e Innovación (ISCIII). MARIA CRISTINA SANCHEZ GARCIA. (Universidad Complutense de Madrid). 01/01/2012-31/12/2014. 134.530,22 €. Principal investigator.

8 **Project**. Involvement of the orphan receptor GPR55 in cannabinoid antitumoral action. Ministerio de Economía y Competitividad (Acciones Integradas). MARIA CRISTINA SANCHEZ GARCIA. (Universidad Complutense de Madrid). 01/01/2010-31/12/2011. Principal investigator.

9 **Project**. Cannabinoides no psicoactivos como posibles agentes antitumorales en cancer de mama.. MINISTERIO DE SANIDAD Y CONSUMO. MARIA CRISTINA SANCHEZ GARCIA. (Universidad Complutense de Madrid). 01/01/2009-31/12/2011. 93.000 €.

10 **Project**. Cannabinoides naturales frente a sintéticos: efecto sobre la evolución de tumores de mama. MARIA CRISTINA SANCHEZ GARCIA. (Universidad Complutense de Madrid). 16/04/2007-15/04/2010.

11 **Project**. CONTROL DEL CICLO CELULAR POR CANNABINOIDES: POSIBLES IMPLICACIONES TERAPÉUTICAS EN EL CÁNCER DE MAMA.. MINISTERIO DE SANIDAD Y CONSUMO. MARIA CRISTINA SANCHEZ GARCIA. (Universidad Complutense de Madrid). 28/12/2004-30/12/2007. 44.000 €.

12 **Project**. CONTROL DEL CICLO CELULAR OR CANNABINOIDES. POSIBLES IMPLICACIONES TERAPÉUTICAS EN EL CÁNCER DE MAMA. Universidad Complutense de Madrid. MARIA CRISTINA SANCHEZ GARCIA. (Universidad Complutense de Madrid). 01/01/2005-31/12/2005. 5.100 €.

13 **Contract**. Anti-tumor effect of cannabinoids in HER2+ and triple-negative breast cancer Zelda Therapeutics Ltd. MARIA CRISTINA SANCHEZ GARCIA. (Universidad Complutense). 01/04/2016-01/08/2020. 290.000 €.

14 **Contract**. Efecto antitumoral de los cannabinoides en cáncer de mama y otros cánceres GW Pharma Ltd. MARIA CRISTINA SANCHEZ GARCIA. 01/10/2009-31/12/2015. 350.000 €.

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

1 **Patent of invention**. Eduardo Pérez Gómez; Sandra Blasco Benito; Cristina Sánchez García. WO 2018/071986 A1. Prognostic method and kits useful in said method Australia. 21/10/2016. Zelda Therapeutics Operations Pty Ltd.

2 **Patent of invention**. Nadine Jagerovic; Paula Morales Lázaro; Pilar Goya Laza; Sandra Blasco Benito; Cristina Sánchez García; María Gómez Cañas; J Javier Fernández Ruiz. PCT/ES2015/070184. Nuevas cromenopirazoldionas moduladoras de receptores cannabinoides CB2 con actividad antitumoral Spain. 01/08/2016. Consejo Superior de Investigaciones Científicas y Universidad Complutense de Madrid.

3 **Patent of invention**. Cristina Sánchez García; Manuel Guzmán Pastor; Stephen Wright; Colin Stott; María Muñoz Caffarel; Clara Andradas Arias; Eduardo Pérez Gómez. UK/18/10/2011. Phytocannabinoids for use in the treatment of breast cancer United Kingdom. 18/10/2011. GW Pharmaceuticals.

4 **Patent of invention**. Ismael Galve Roperh; Manuel Guzmán Pastor; Cristina Sánchez García. P200000323. Terapia con cannabinoides para el tratamiento de tumores cerebrales Spain. 11/02/2000. GW Pharmaceuticals.