

CV Date	06/10/2025
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## Part A. PERSONAL INFORMATION

First Name	Guillermo		
Family Name	Velasco Díez		
Sex	Male	Date of Birth	18/02/1970
ID number Social Security, Passport	50443341V		
URL Web	<a href="https://www.idissc.org/investigador/guillermo-velasco-diez/">https://www.idissc.org/investigador/guillermo-velasco-diez/</a>		
Email Address	gvelasco@ucm.es		
Open Researcher and Contributor ID (ORCID)	0000-0002-1994-2386		

### A.1. Current position

Job Title	Catedrático de Universidad		
Starting date	2025		
Institution	Universidad Complutense de Madrid		
Department / Centre	Bioquímica y Biología Molecular / CC Químicas		
Country	Spain	Phone Number	(+34) 913945034
Keywords	Molecular mechanism of disease; Laboratory animals; Cell culture; Molecular, cellular and genetic biology		

### A.2. Previous positions (Research Career breaks included)

Period	Job Title / Name of Employer / Country
2003 - 2008	Profesor Contratado Doctor / Universidad Complutense de Madrid
2001 - 2003	Profesor Ayudante 2º periodo / Universidad Complutense de Madrid
1999 - 2001	Profesor Ayudante 1er periodo / Universidad Complutense de Madrid
1998 - 1999	EMBO Postdoctoral fellow / University of Dundee
2008 -	Profesor Titular de Universidad / Universidad Complutense de Madrid

### A.3. Education

Degree/Master/PhD	University / Country	Year
Programa Oficial de Doctorado en Bioquímica y Biología Molecular	Universidad Complutense de Madrid	1997
Licenciado en Ciencias Biológicas	Universidad Complutense de Madrid	1993

## Part B. CV SUMMARY

Guillermo Velasco studied Biology (1988-1993) and carried out his doctoral thesis (1994-1997) at Complutense University (UCM) and a postdoctoral stage in the laboratory of Dr. Philip Cohen (1998-1999) at the University of Dundee, Scotland. He rejoined the UCM as Assistant Professor, later obtaining a position as “Professor Contratado Doctor” (2003) and subsequently as Associate Professor (“Profesor Titular de Universidad”) (2008) of the Department of Biochemistry and Molecular Biology. In January 2023 he got the accreditation to become Full Professor that he gained in February 2025. He is currently leader of the “Cannabinoid signaling in cancer cells group” (ONC.5) at the Instituto de Investigaciones Sanitarias San Carlos (IDISSC). Since 2019, Guillermo has also become the research coordinator for the Translational Oncology laboratory at the Hospital Clínico San Carlos.

**Scientific achievements:** The studies developed by Guillermo Velasco’s group have contributed to identify the mechanism of cannabinoid anticancer activity, and the factors for

resistance to the action of these agents in gliomas and have led to the development of several cannabinoid-based combinatory strategies that have been translated into clinical studies. Likewise work in his group has contributed to clarify the mechanisms involved in autophagy-mediated cancer cell death as well as the role of Tribbles proteins in cancer. These and other findings have been communicated in many international meetings and published in some of the most important journals in the field of Biomedical research (for example Cancer Cell, Cancer Research, Journal of Clinical Investigation, Cell Death and Differentiation or Nature Reviews Cancer). Guillermo Velasco has obtained funding from international, national, local and private sources. He has obtained 6 consecutive projects of the AES (strategic action in Health from ISCIII: PS09, PI12, PI15, PI18, PI21 and PI24) and acted as PI of the IDISSC node of the Marie Skłodowska Curie ITN action "TRAIN". Likewise, he has obtained funding from different national and international Charities such as "Breast Cancer Now", "Voices against Brain Cancer" and "Medical Cannabis Bike Tour" and established agreements with several pharmaceutical companies "GW Pharmaceuticals", "Cellmid/Lyramid Ltd" or "Neuron Consulting". Guillermo Velasco has also established a wide network of collaborators with researchers from many national and international institutions being part of the steering committee of several research consortiums such as the COST action Transautophagy and the networks of excellence NEAR (that led to the creation of the Spanish society of Research on Autophagy - SEFAGIA, from which he is currently president) and METABOCANCER (currently ongoing)

**Social contributions.** Work by Guillermo Velasco's group has generated four patents and has laid the grounds for the development of three clinical trials in glioblastoma patients: NCT01812616, promoted by the company GW pharma ltd., GEINNOCAN (currently ongoing and promoted by GEINO) and NCT02270034 (promoted by GEINO). Likewise, Guillermo Velasco has designed and participated in numerous outreach activities to engage with the public and patients including activities of the "European Researchers Night", "Science week" and "Neurobeers".

**Training and management capacity:** Guillermo Velasco has been director of 9 PhD theses (5 of them defended in the last 5 years) and is currently supervising 5 more PhD students. Likewise, he has supervised 9 postdoctoral researchers and numerous end of master (TFMs) and end of degree (TFG) projects. Most of the former members of his group are currently working in academia, biomedical research, or the pharmaceutical industry and have developed a successful career in these areas.

Guillermo Velasco is part of the steering Committee of the Master's Degree in Biochemistry, Molecular Biology and Biomedicine at the Complutense University and was the director of a doctoral course on Molecular and Translational Oncology as part of the Latin American Complutense School.

Guillermo acts as academic editor of the journals "Plos One" and "Cancers" and has coordinated special issues in the Journals "Cancers" and "Frontiers in Cell Biology". Likewise, he is a frequent reviewer of numerous journals in the field of Biomedicine, especially "Cell Death and Differentiation" and "Autophagy". He also has participated as reviewer of numerous funding agencies being member of the FWO panel for international collaboration for 6 years. Among other management activities, Guillermo has been a member of the delegated commission of the IDISSC, leader of the working group 4 (WG4) and member of the "Management Committee" and the "Core group of the COST action "Transautophagy", organized various conferences and training activities. Likewise Guillermo is currently member of the scientific committee of IDISSC and president of SEFAGIA.

## Part C. RELEVANT ACCOMPLISHMENTS

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

AC: corresponding author. (n° x / n° y): position / total authors. If applicable, indicate the number of citations

- 1 **Scientific paper.** Martínez-García M; (2/14) Velasco G; Pineda E; et al; Sepúlveda-Sánchez JM. 2022. Safety and Efficacy of Crizotinib in Combination with Temozolomide and Radiotherapy in Patients with Newly Diagnosed Glioblastoma: Phase Ib GEINO 1402 Trial. *Cancers*. 14. <https://doi.org/10.3390/cancers14102393>
- 2 **Scientific paper.** Maiani, Emiliano; Milletti, Giacomo; Nazio, Francesca; et al; Cecconi, Francesco; (40/46) Velasco, Guillermo. 2021. AMBRA1 regulates cyclin D to guard S-phase entry and genomic integrity. *NATURE. NATURE RESEARCH*. 592-7856, pp.799-+. ISSN 1476-4687. <https://doi.org/10.1038/S41586-021-03422-5>
- 3 **Scientific paper.** Pau Muñoz Guardiola; Josefina Casas; Elisabet Megías Roda; et al; José M. Lizcano. 2020. The anti-cancer drug ABTL0812 induces ER stress-mediated cytotoxic autophagy by increasing dihydroceramide levels in cancer cells. *Autophagy*. Taylor & Francis. 17-6, pp.1349-1366. <https://doi.org/10.1080/15548627.2020.1761651>
- 4 **Scientific paper.** Israel López Valero; David Dávila; José González Martínez; et al; (18/18) Guillermo Velasco (AC). 2020. Midkine signaling maintains the self-renewal and tumorigenic capacity of glioma initiating cells. *Theranostics*. 10-11, pp.5120-5136. <https://doi.org/10.7150/THNO.41450>
- 5 **Scientific paper.** Lopez-Valero, Israel; Saiz-Ladera, Cristina; Torres, Sofia; et al; (14/14) Velasco, Guillermo (AC). 2018. Targeting Glioma Initiating Cells With A Combined Therapy Of Cannabinoids and Temozolomide. *Biochemical pharmacology*. ISSN 1873-2968. <https://doi.org/10.1016/J.BCP.2018.09.007>
- 6 **Scientific paper.** Hernández-Tiedra, S.; Fabriàs, G.; Dávila, D.; et al; (26/26) Velasco, G. (AC). 2016. Dihydroceramide accumulation mediates cytotoxic autophagy of cancer cells via autolysosome destabilization. *Autophagy*. 12, pp.2213-2229. ISSN 1554-8627. <https://doi.org/10.1080/15548627.2016.1213927>
- 7 **Scientific paper.** Cianfanelli, Valentina; Fuoco, Claudia; Lorente, Mar; et al; Cecconi, Francesco; (21/22) Velasco, Guillermo. 2015. AMBRA1 links autophagy to cell proliferation and tumorigenesis by promoting c-Myc dephosphorylation and degradation. *Nature cell biology*. 17-1, pp.20-30. ISSN 1465-7392. <https://doi.org/10.1038/ncb3072>
- 8 **Scientific paper.** (1/3) Velasco, G. (AC); Sanchez, C.; Guzman, M. 2012. Towards the use of cannabinoids as antitumour agents. *Nature Reviews Cancer*. 12-6, pp.436-444. ISSN 1474-175X. <https://doi.org/10.1038/NRC3247>
- 9 **Bibliographic review.** Kusaczuk M; Ambel ET; Naumowicz M; (4/4) Velasco G (AC). 2023. Cellular stress responses as modulators of drug cytotoxicity in pharmacotherapy of glioblastoma. *Biochimica et biophysica acta. Reviews on cancer*. 1879, pp.189054. ISSN 0304-419X. <https://doi.org/10.1016/j.bbcan.2023.189054>
- 10 **Scientific paper.** Kusaczuk, Magdalena; Tovar-Ambel, Elena; Martin-Cabrera, Paola; et al; Naumowicz, Monika. 2024. Cytotoxicity, Proapoptotic Activity and Drug-like Potential of Quercetin and Kaempferol in Glioblastoma Cells: Preclinical Insights. *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES*. MDPI. 25. ISSN 1661-6596. <https://doi.org/10.3390/ijms251910740>

### C.3. Research projects and contracts

- 1 **Project.** PI24/00866, Hacia del desarrollo de terapias individualizadas contra el Glioblastoma basadas en el bloqueo del eje MDK/ALK y la utilización de cannabinoides: impacto en las células iniciadoras de glioma y el microambiente tumoral. Instituto de Salud Carlos III. (IDISSC-UCM). 01/01/2025-31/12/2027. 315.000 €. Principal investigator.
- 2 **Project.** ASAP-CM (ADVANCED STRATEGIES AND NEW APPROACHES FOR PROTON THERAPY). Consejería de educación, Universidades y Ciencia de la Comunidad de Madrid. Luis Mario Fraile. (IDISSC-UCM). 01/01/2023-31/12/2026. 823.000 €. Principal investigator. G Velasco is IP of the IDISSC-UCM group within the consortium (the budget of the IDISSC group is 78.000 € for the 4 years)
- 3 **Project.** Understanding FLASH radiotherapy with tissue-on-chip devices and hyperpolarisation-enhanced magnetic resonance: FLASHonChip (PLEC2022-009256). Irene Marc-Rius. (FUNDACIO PRIVADA INSTITUT DE BIOENGINYERIA DE CATALUNYA). 01/01/2023-31/12/2025. 900.000 €. G Velasco and his group are collaborators in the group of Almudea Porras (PI of the IDISSC group) The IDISSC group is part of the consortium

- 4 **Project.** Red de excelencia: Interacciones celulares y sistémicas entre el cáncer y la señalización metabólica (RED2022-134397-T). Raúl Luque. (Universidad de Córdoba). 01/06/2023-31/05/2025. 19.100 €.
- 5 **Project.** Hacia el Desarrollo de terapias individualizadas en gliomas basadas en el bloqueo del eje MDK/ALK y la utilización de cannabinoides. Instituto de Salud Carlos III. Velasco Díez. (UCM-IdISSC). 01/01/2022-31/12/2024. 268.620 €. Co-ordinator.
- 6 **Project.** TRAIN (Tribbles Research And Innovation Network) (TRAIN - GA721532). European Union - Marie Slodwoska Curie European Training networks (TRAIN - GA721532); European Union - Marie Slodwoska Curie European Training networks. Endre Kiss-Toth. (Instituto de Investigación Sanitaria San Carlos - Universidad Complutense (IdISSC-UCM)). 10/10/2016-10/10/2020. 3.368.370 €. Principal investigator. El solicitante es IP del grupo IdiSSC-UCM El subgrupo IdiSSC tiene asignados dos estudiantes de doctorado
- 7 **Contract.** Efficacy of Bevacizumab in combination with cannabinoids and/or cannabinoids and TMZ in glioma models Neuron Consulting. Guillermo Velasco Díez. 03/12/2019-03/06/2021. 30.000 €.
- 8 **Contract.** Asesoramiento sobre el funcionamiento, organización, planificación y establecimiento de colaboraciones relacionadas con la Investigación en Oncología Traslacional FUNDACION PARA LA INVESTIGACION HOSPITAL CLINICO SAN CARLOS. Guillermo Velasco Díez. 07/02/2019-07/04/2024. 125.000 €.
- 9 **Contract.** Towards the utilization of cannabinoids as anticancer agents in gliomas Voices Against Brain Cancer. Guillermo Velasco Díez. 03/05/2016-02/02/2019. 88.000 €.

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

- 1 **Patent of invention.** Velasco Díez 1; Tovar Ambel 3; Lorente Pérez 2; Bhogal. P202330291. COMBINACIÓN FARMACÉUTICA PARA EL TRATAMIENTO DE GLIOMAS P202330291 Spain. 12/04/2023. Complutense University.
- 2 Daniela Parolaro; Paola Massi; Angelo Antonio Izzo; Francesca Borelli; Gabriella Aviello; Vincenzo Di Marzo; Luciano De Petrocellis; Aniello Schiano Moriello; Alessia Ligresti; Ruth Alexandra Ross; Lesley Ann Ford; Sharon Anavi-Goffer; Manuel Guzman; Guillermo Velasco; Mar Lorente; Sofia Torres; Tetsuro Kikuchi; Geoffrey Guy; Colin Stott; Stephen Wright; Alan Sutton; David Potter; Etienne De Meijer. US8790719B2. Phytocannabinoids in the treatment of cancer United States of America. 29/07/2014. GW Pharmaceuticals PLC.
- 3 Guillermo Velasco; Manuel Guzmán; Mar Lorente; Sofia Torres. US 12/996,167. Cannabinoids in combination with non-cannabinoids chemotherapeutic agents (US20110086113 A1) United States of America. 14/04/2014. GW Pharmaceuticals y Otsuka Pharmaceuticals.
- 4 Guillermo Velasco; Manuel Guzmán; Mar Lorente; Sofia Torres; Fátima Rodríguez. US 12/996,124. Antitumoral effects of cannabinoids combinations (PCT/GB2009/050621) United States of America. 21/01/2014. GW Pharmaceuticals y Otsuka Pharmaceuticals.