

Fecha del CVA

04/03/2024

Parte A. DATOS PERSONALES

Nombre *	Alicia		
Apellidos *	Villacampa Calvo		
Sexo *	No Contesta	Fecha de Nacimiento *	
DNI/NIE/Pasaporte *		Teléfono *	
URL Web			
Dirección Email			
Identificador científico	Open Researcher and Contributor ID (ORCID) *	0000-0002-7398-8545	
	Researcher ID		
	Scopus Author ID		

* Obligatorio

A.1. Situación profesional actual

Puesto	Investigadora postdoctoral		
Fecha inicio	2022		
Organismo / Institución	Facultad de Medicina		
Departamento / Centro			
País		Teléfono	
Palabras clave	230200 - Bioquímica; 230221 - Biología molecular; 240701 - Cultivo celular		

A.2. Situación profesional anterior

Periodo	Puesto / Institución / País
2017 - 2021	Investigadora predoctoral / Centro de Investigaciones Biológicas

A.3. Formación académica

Grado/Master/Tesis	Universidad / País	Año
Programa Oficial de Doctorado en Biología	Facultad de Ciencias	2021
Máster en Biomoléculas y dinámica celular	Facultad de Ciencias	2016
Graduado o Graduada en Bioquímica	Facultad de Ciencias	2015

Parte B. RESUMEN LIBRE DEL CURRÍCULUM

Postdoctoral researcher in the Pharmacology department of Universidad Autónoma de Madrid with Dr. Concepción Peiró and Dr. Carlos F Sánchez-Ferrer. Currently studying the effects of SARS-CoV2 S protein in inflammation, coagulation, and senescence of endothelial cells. We use Human Umbilical Vein Endothelial Cells (HUVEC), and analysis by western blot, qPCR, immunofluorescence, or metabolic profiling with Seahorse. Previous experience includes PhD in CIB-CSIC with Dr. F Javier Medina, studying the effects of microgravity on the growth and development of Arabidopsis thaliana. During the PhD, I did a short stay in the University of Wisconsin (Madison) in Dr. Simon Gilroy laboratory. Main laboratory techniques during the predoctoral contract include plant culture, RNA-seq processing and analysis and confocal and electron microscopy. In addition, my Master and Bachelor thesis were done in CBMSO with Dr. Susana Cadenas studying the effects of hypoxia/reoxygenation on ROS production and UCP3 expression in mouse skeletal muscle cells.

Parte C. MÉRITOS MÁS RELEVANTES
C.1. Publicaciones

AC: Autor de correspondencia; (nº x / nº y): posición firma solicitante / total autores. Si aplica, indique el número de citaciones

- 1 **Artículo científico.** (1/13) Villacampa, A.; Alfaro, E.; Morales, C.; et al; Peiró, C.2024. SARS-CoV-2S protein activates NLRP3 inflammasome and deregulates coagulation factors in endothelial and immune cells. Cell communication and signaling. Springer. 22-38. SCOPUS (3) <https://doi.org/10.1186/s12964-023-01397-6>
- 2 **Artículo científico.** Barker, R.; Kruse, C.P.S.; Johnson, C.; et al; Gilroy, S.; (9/20) Villacampa, A.2023. Meta-analysis of the space flight and microgravity response of the Arabidopsis plant transcriptome. npj microgravity. Nature. 9-21. SCOPUS (9) <https://doi.org/10.1038/s41526-023-00247-6>
- 3 **Artículo científico.** (1/4) Villacampa, A.; Fañanás-Pueyo, I.; Medina, F.J.; Ciska, M.2022. Root growth direction in simulated microgravity is modulated by a light avoidance mechanism mediated by flavonols. Physiologia Plantarum. Wiley. 174. ISSN 0031-9317. SCOPUS (6) <https://doi.org/10.1111/ppl.13722>
- 4 **Artículo científico.** Medina, F.J.; Manzano, A.; (3/5) Villacampa, A.; Ciska, M.; Herranz, R.2021. Understanding Reduced Gravity Effects on Early Plant Development Before Attempting Life-Support Farming in the Moon and Mars. Frontiers in Astronomy and Space Sciences. Frontiers. 8. SCOPUS (20) <https://doi.org/10.3389/fspas.2021.729154>
- 5 **Artículo científico.** Overbey, E.G.; Saravia-Butler, A.M.; Zhang, Z.; et al; Galazka, J.M.; (39/45) Villacampa, A.2021. NASA GeneLab RNA-seq consensus pipeline: Standardized processing of short-read RNA-seq data. iScience. Elsevier. 24-4. SCOPUS (13) <https://doi.org/10.1016/j.isci.2021.102361>
- 6 **Artículo científico.** (1/5) Villacampa, A.; Sora, L.; Herranz, R.; Medina, F.J.; Ciska, M.2021. Analysis of Gravitoresponse and Biological Effects of Vertical and Horizontal Clinorotation in Arabidopsis thaliana Root Tip. Plants. MDPI. 10-734. SCOPUS (9) <https://doi.org/10.3390/plants10040734>
- 7 **Artículo científico.** (1/7) Villacampa, A.; Ciska, m.; Manzano, A.; Vandenbrink, J.P.; Kiss, J.Z.; Herranz, R.; Medina, F.J.2021. From Spaceflight to Mars g-Levels: Adaptive Response of A. Thaliana Seedlings in a Reduced Gravity Environment Is Enhanced by Red-Light Photostimulation. International Journal of Molecular Sciences. MDPI. 22-899. SCOPUS (21) <https://doi.org/10.3390/ijms22020899>
- 8 **Artículo científico.** Manzano, A.; (2/6) Villacampa, A.; Sáez-Vásquez, J.; Kiss, J.Z.; Medina, F.J.; Herranz, R.2020. The Importance of Earth Reference Controls in Spaceflight -Omics Research: Characterization of Nucleolin Mutants from the Seedling Growth Experiments. iScience. Elsevier. 23-101686. SCOPUS (13) <https://doi.org/10.1016/j.isci.2020.101686>
- 9 **Artículo científico.** Manzano, A.; Creus, E.; Tomás, A.; et al; Herranz, R.; (5/10) Villacampa, A.2020. The FixBox: Hardware to Provide on-Orbit Fixation Capabilities to the EMCS on the ISS. Microgravity Science and Technology. Springer. 32, pp.1105-1120. SCOPUS (3) <https://doi.org/10.1007/s12217-020-09837-5>
- 10 **Artículo científico.** Herranz, R.; Vandenbrink, J.P.; (3/8) Villacampa, A.; Manzano, A.; Poehlman, W.L.; Feltus, F.A.; Kiss, J.Z.; Medina, F.J.2019. RNAseq Analysis of the Response of Arabidopsis thaliana to Fractional Gravity Under Blue-Light Stimulation During Spaceflight. Frontiers in Plant Science. Frontiers. 10. SCOPUS (32) <https://doi.org/10.3389/fpls.2019.01529>
- 11 **Artículo científico.** Vandenbrink, J.P.; Herranz, R.; Poehlman, W.L.; Feltus, F.A.; (5/8) Villacampa, A.; Ciska, M.; Medina, F.J.; Kiss, J.Z.2019. RNA-seq analyses of Arabidopsis thaliana seedlings after exposure to blue-light phototropic stimuli in microgravity. American Journal of Botany. Wiley. 106-11, pp.1466-1476. ISSN 0002-9122. SCOPUS (42) <https://doi.org/10.1002/ajb2.1384>
- 12 **Capítulo de libro.** Herranz, R.; Valbuena, M.A.; Manzano, A.; Kamal, K.Y.; (5/8) Villacampa, A.; Ciska, M.; van Loon, J.J.W.A.; Medina, F.J. Use of Reduced Gravity Simulators for Plant Biological Studies. Methods in Molecular Biology. Springer. 2368, pp.241-265. ISBN 978-1-0716-1676-5. SCOPUS (2) https://doi.org/10.1007/978-1-0716-1677-2_16

- 13 Carta.** Madrigal, P.; Gabel, A.; (3/18) Villacampa, A.; et al; Herranz, R.2020. Revamping Space-omics in Europe. Cell Systems. Elsevier. 11-6, pp.555-556. SCOPUS (10) <https://doi.org/10.1016/j.cels.2020.10.006>

C.2. Congresos

- 1** Villacampa, A.; Morales, C.; Sánchez-Ferrer, C.F.; Peiró, C.. SARS-CoV-2 S protein induces NLRP3 inflammasome activation and coagulation factors in endothelial cells. 28 Reunión Nacional SEHLELHA. Sociedad Española de Hipertensión - Liga Española para la lucha contra la hipertensión arterial. 2023. Participativo - Póster. Congreso.
- 2** Medina, F.J.; Herranz, R.; Manzano, A.; et al; Valbuena, M.A.. Red light enhances plant adaptation to spaceflight and Mars g-levels. Results of the Seedling Growth experiments on the International Space Station. 44th Committee on Space Research (COSPAR) Scientific Assembly. Committee on Space Research (COSPAR). 2022. Participativo - Ponencia invitada/ Keynote. Congreso.
- 3** Vandenbrink, J.P.; Herranz, R.; Poehlman, W.A.; Feltus, F.A.; Villacampa, A.; Medina, F.J.; Kiss, J.Z.. RNAseq Pathway Analysis of Arabidopsis thaliana grown in conditions of microgravity onboard the International Space Station. American Society for Gravitational and Space Research Meeting. American Society for Gravitational and Space Research. 2019. Participativo - Ponencia oral (comunicación oral). Congreso.
- 4** Herranz, R.; Villacampa, A.; Manzano, A.; Vandenbrink, J.P.; Kiss, J.Z.; Medina, F.J.. Adaptation of plant transcriptional profile to Moon and Mars g-levels on board SEEDLING GROWTH spaceflight experiment. American Society for Gravitational and Space Research Meeting. American Society for Gravitational and Space Research. 2019. Participativo - Ponencia oral (comunicación oral). Congreso.
- 5** Villacampa, A.; Sora, L.; Medina, F.J.; Ciska, M.. Comparison of the effect of vertical and horizontal fast and slow clinorotation on A. thaliana seedlings. 26th European Low Gravity Research Association Biennial Symposium. European Low Gravity Research Association. 2019. Participativo - Ponencia oral (comunicación oral). Congreso.
- 6** Villacampa, A.; Medina, F.J.; Ciska, M.. Differential response to simulated microgravity of A. thaliana seedlings depends upon light condition. XXIII meeting of the Spanish Society of Plant Physiology. Sociedad española de biología de plantas. 2019. Participativo - Póster. Congreso.
- 7** Herranz, R.; Villacampa, A.; Ciska, M.; Medina, F.J.. UNOOSA ZGIP experience in Spain: from the primary school to the research center level. United Nations Expert Meeting on Human Space Technology. United Nations Organization. 2018. Participativo - Ponencia oral (comunicación oral). Congreso.
- 8** Villacampa, A.; Sora, L.; Medina, F.J.; Ciska, M.. Optimal clinorotation settings for microgravity simulation in A. thaliana seedlings. International Astronautical Congress. International Astronautical Federation. 2018. Participativo - Ponencia oral (comunicación oral). Congreso.
- 9** Villacampa, A.; Manzano, A.; Ciska, M.; Herranz, R.; Vandenbrink, J.P.; Kiss, J.Z.; Medina, F.J.. Effects of microgravity environment on early development of Arabidopsis thaliana. Jornada Primeros Pasos Departamento de Biología. Departamento de Biología UAM. 2018. Participativo - Póster. Jornada.

C.5. Estancias en centros de I+D+i públicos o privados

University of Wisconsin. Department of Botany. Estados Unidos de América. Madison (Wisconsin). 14/01/2020-18/03/2020. 2 meses - 4 días. Doctorado/a.