

CV Date	20/10/2023
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Part A. PERSONAL INFORMATION

First Name	Maria Angeles		
Family Name	Juanes Ortiz		
Sex	Female	Date of Birth	
ID number Social Security, Passport	22577574S		
URL Web	https://www.juaneslab.com/		
Email Address	majuaor@uv.es; majuanes@cipf.es		
Open Researcher and Contributor ID (ORCID)	0000-0002-9801-9652		

A.1. Current position

Job Title	Group Leader		
Starting date	2022		
Institution	Centro de Investigación Príncipe Felipe		
Department / Centre			
Country	Spain	Phone Number	
Keywords			

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

Period	Job Title / Name of Employer / Country
2022 - 2026	Honorary Fellow / Teesside University-UK
2020 - 2022	Group Leader / National Horizons Centre / Teesside University-UK
2022 - 2022	Senior Lecturer / Teesside University-UK
2020 - 2022	Lecturer in Biomedical Science / Teesside University-UK / United Kingdom
2015 - 2020	Senior Postdoc / Brandeis University (USA)
2018 - 2018	Visitor Scientist / CNRS-CRCM-Institut Paoli Calmettes-France
2018 - 2018	Visitor Scientist / Fresnel Institut-Université Saint Jerome-France
2010 - 2014	postdoc / CRBM, CNRS, Montpellier, France
2013 - 2013	Postdoctoral Researcher / IMB a star, Singapore
2008 - 2010	Postdoc / Cambridge University-UK
2008 - 2008	Assistant researcher / Facultat de Biologia, University of Valencia, Spain

A.3. Education

Degree/Master/PhD	University / Country	Year
PhD in Biochemistry and Cellular Biology	Universitat de Valencia-Facultat Biologia / Spain	2008

Part B. CV SUMMARY

Dr Juanes performed her PhD studies at the University of Valencia (Spain). Then, she embarked in several postdoctoral studies at University of Cambridge (UK), Institute of Medical Biology A-Star (Singapore), CNRS institutions – CRBM in Montpellier, CRCM-Institut Paoli Calmettes and Institut Fresnel in Marseille (France) and Brandeis University (USA). In February 2020, she moved to Teesside University (TU) in Middlesbrough (UK) where she delivered lectures and initiated her career as a Group Leader at the National Horizons Centre, a research facility from TU located in Darlington. She obtained immediately funding from: (i) the Academy of Medical Science and (ii) Proof of concept Thyme from North East UK Consortium. In April 2022, Dr Juanes was promoted to Senior Lecturer in Biomedical Science. In July 2022, she

was awardee as Honorary Associate at TU, which is the highest title awardee to individuals whom UK Universities wish to honor, and as the winner of Research Excellence by Teesside University.

Also in July 2022, she succeeded in obtaining a Cidegent grant funded by Conselleria de Valencia (Plan Gen T- Generacio Talent) which shows her Excellence Research. Thanks to that she moved back to Spain and started her research group as a Group Leader at the CIPF. In September 2023, she succeeded in obtaining funding from 'Proyectos de Generacion de Conocimiento 2022 (PID)' , as well as the Certificado R3 that qualify her as Established Investigator from Agencia Estatal de Investigacion (Spanish Government).

Dr Juanes lab goal is to understand cytoskeleton mechanisms in collective migration, gut homeostasis and cancer invasion, and how dysfunction of those processes could be paliated. The lab has two main axis: (i) cell migration and invasion linked to cytoskeletal and metabolism, (ii) drug discovery. The goal is to identify dysfunctional processes, discover new biomarkers and drugs for personalized therapies. Dr Juanes is expert in biochemistry, genetics, proteomics, cell biology, and advanced cell imaging. She has used models such as reconstituted proteins, budding yeast, mammalian cell lines and mouse.

Earlier during her career, she focused on cytoskeletal regulation in cell polarity, cell cycle events and spindle morphogenesis. In 2015, she started and led an independent program as senior postdoc centred on the tumour suppressor Adenomatous polyposis coli (APC) that has been the foundation of her research as a PI. She found that APC nucleates actin filaments in cells, and that this activity promotes adhesion turnover and directed cell migration. In addition, this activity is synergized by the formin Dia1 and inhibited by the microtubule-end plus protein (EB1), and powers cell remodelling of colorectal cancer monolayers. She has been published in prestigious journals as a corresponding author (e.g. Journal of Cell Biology, Current Biology, iScience, Cancers, Current Opinion in Cell Biology, Springer Nature, and Journal of Life Science). She has also published in prestigious journals such as Nature Communications, Plos Genetics, MBoC, JCS. Dr Juanes is serving in committees to evaluate projects from the 'Agencia Nacional de Evaluación de la Calidad y Acreditación', Agence National de la Recherche (ANR, France), BBSRC fellowships and she is part of the Peer Review College committee for evaluating funding at TU UK. She also serves peer-reviewing papers in prestigious journals.

Dr Juanes has taught to undergraduate students at Univ. of Valencia for 120h in 2005-2006, IMFAHE program for 30h in 2017-18, at TU for >300h in 2020-2022, and at UPV in 2023. She has supervised several undergraduate students and trained PhD students. Dr Juanes has been invited to deliver seminars at international – national Universities (e.g. Cambridge), research institutions (e.g. CNRS Bordeaux, Marseille) and conferences (e.g. ASCB, CNRS Jaques Monod) and has participated in many outreach activities involving media (radio/ TV), visits to Schools and events to promote Women in Science and Science activities for public in general such as 'La Noche de la Investigacion' at Ciutat de Les Ciencies i les Arts de Valencia. Currently, she is training several undergraduate and PhD students in her lab at CIPF.

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.** LB; AI; HMB; ZAB; MAJ (AC). 2023. APC-driven actin nucleation powers collective cell dynamics. *inScience*. Elsevier. 106583. <https://doi.org/10.1016/j.isci.2023.106583>
- 2 **Scientific paper.** MAJO (AC); CPF; GJH; RJ; BLG. 2020. EB1 directly regulates APC-mediated actin nucleation. *Current Biology*. 30-23, pp.4763-4772. <https://doi.org/10.1016/j.cub.2020.08.094>
- 3 **Scientific paper.** Juanes MA (AC); Iznardon D; Badache A; Brasselet S; Mavrakakis M; Goode BL. 2019. The role of APC-mediated actin assembly in microtubule capture and focal adhesion turnover. *The role of APC-mediated actin assembly in microtubule capture and focal adhesion turnover. Journal of Cell Biology*. 218-10, pp.3415-3435. scholar.google.citations (11) <https://doi.org/10.1083/jcb.201904165>
- 4 **Scientific paper.** DT; MAJ; SI; GR; Simonetta Piatti. 2018. Recruitment of the mitotic exit network to yeast centrosomes couples septin displacement to actomyosin constriction. *Nature Communications*. scholar google (16)
- 5 **Scientific paper.** JHR; MAJ; BLG. 2017. Profilin Directly Promotes Microtubule Growth through Residues Mutated in Amyotrophic Lateral Sclerosis. *Current Biology*. 27-22, pp.3535-3543. scholar google (27)
- 6 **Scientific paper.** MAJ (AC); HB; JAE; RJ; AB; BLG. 2017. Adenomatous polyposis coli nucleates actin assembly to drive cell migration and microtubule-induced focal adhesion turnover. *Journal of Cell Biology*. 216-9, pp.2859-2875. scholar google (49)
- 7 **Scientific paper.** MAJ; SP. 2016. Control of Formin Distribution and Actin Cable Assembly by the E3 Ubiquitin Ligases Dma1 and Dma2. *Genetics*. 204-1, pp.205-220. scholar google (10)
- 8 **Scientific paper.** LM; AB; MAJ; et al; SP. 2015. Rho1- and Pkc1-dependent phosphorylation of the F-BAR protein Syp1 contributes to septin ring assembly. *MBoC*. 26-18, pp.3245-3262. scholar google (16) <https://doi.org/10.1091/mbc.E15-06-0366>
- 9 **Scientific paper.** MAJ (AC); CAMG; MCB. 2017. Rot1, an essential yeast protein, is degraded through the ER-associated protein degradation system (ERAD). *Journal of Life Sciences*.
- 10 **Scientific paper.** Carlos A. Martínez-Garay; M. Angeles Juanes; J. Carlos Igual; Ismael Mingarro and M. Carmen Bañó. 2014. Transmembrane Ser of Rot1 protein is essential for yeast cell viability. *Biochemical Journal*. 26, pp.3245-3262. scholar google (3) <https://doi.org/10.1042/BJ20131306>
- 11 **Scientific paper.** M. Angeles Juanes; Rita Khoueir; Thomas Kupka; Anna Castro; Ingrid Mudrak; Egon Ogris; Thierry Lorca and Simonetta Piatti. 2013. Budding yeast Greatwall and Endosulfines control activity and spatial regulation of PP2A^{Cdc55} for timely mitotic progression, *PLoS Genetics*, 9 (7): (2013). *Plos Genetics*. 458, pp.239-249. scholar google (49) <https://doi.org/10.1371/journal.pgen.1003575>
- 12 **Scientific paper.** M. Angeles Juanes; Hanlu Twyman; Edward Tunnacliffe; Zhiang Guo; Rogier ten Hoopen and Marisa Segal. 2013. Spindle pole body history intrinsically links pole identity with asymmetric fate in budding yeast. *Current Biology*. 23-14, pp.1310-1319. scholar google (25) <https://doi.org/10.1016/j.cub.2013.05.057>.
- 13 **Scientific paper.** Rogier ten Hoopen; Cristina Cepeda-Garcia; Rosario Fernandez-Arruti; M. Angeles Juanes; Nathalie Delgehr and Marisa Segal. 2012. Mechanism for astral microtubule capture by cortical Bud6p priming spindle polarity in *S. cerevisiae*. *Current Biology*. 23, pp.1310-1319. scholar google (45)
- 14 **Scientific paper.** M. Angeles Juanes; Rogier ten Hoopen; Marisa Segal. 2011. Ase1p phosphorylation by cyclin-dependent kinase promotes correct spindle assembly in *S. cerevisiae*. *Cell Cycle*. 10-12, pp.1088-1097. scholar google (5)

- 15 Scientific paper.** Cristina Cepeda Garcia; Nathalie Delgehr; M. Angeles Juanes Ortiz; Rogier ten Hoopen; Alisa Zhiteneva; MS. 2010. Actin-mediated delivery of astral microtubules instructs Kar9p asymmetric loading to the bud-ward spindle. MBoC. 21-15, pp.2585-2595. scholar google (25) <https://doi.org/10.1091/mbc.e10-03-0197>
- 16 Scientific paper.** M. Angeles Juanes; Carlos Andrés Martínez-Garay; Juan Carlos Igual; MCB. 2010. Targeting and membrane insertion into the endoplasmic reticulum membrane of Saccharomyces cerevisiae essential protein Rot1. FEMS Yeast Research. 10-6, pp.639-647. scholar google (5) <https://doi.org/10.1111/j.1567-1364.2010.00653.x>
- 17 Scientific paper.** M. Angeles Juanes; Juan Carlos Igual; MCB. 2008. Membrane topology and post-translational modification of the Saccharomyces cerevisiae essential protein Rot1. Yeast. 10, pp.639-647. scholar google (12)
- 18 Scientific paper.** M. Angeles Juanes; Ethel Queralt; M. Carmen Bañó; JCI. 2007. Rot1 plays an antagonistic role to Clb2 in actin cytoskeleton dynamics throughout the cell cycle. Journal of Cell Science. 25, pp.93-106. scholar google (14) <https://doi.org/10.1242/jcs.002758>
- 19 Book chapter.** Hannah; MA (AC). 2023. Automated Quantitative Analysis of Shape Features in Human Epithelial Monolayers and Spheroids Generated from Colorectal Cancer Cells. Intestinal Differentiated Cells. Humana, New York, NY.. 2650, pp.261-271. ISBN 978-1-0716-3075-4.
- 20 Book chapter.** Peixun; MA (AC). 2023. Confocal Laser Scanning Imaging of Cell Junctions in Human Colon Cancer Cells. Intestinal Differentiated Cells. Humana, New York, NY. 2650, pp.245-259. ISBN 978-1-0716-3075-4.
- 21 Scientific edition.** JLHR; MAJ; BLG. 2017. Profilin Directly Promotes Microtubule Growth through Residues Mutated in Amyotrophic Lateral Sclerosis. MBoC. 28, pp.1138.
- 22 Scientific edition.** GJH; MAJ; BLG. 2017. Spatiotemporal Control of Actin Assembly at the Leading Edge by IQGAP.MBoC. 28, pp.605.
- 23 Bibliographic review.** MM; MAJ (AC). 2023. The compass to follow: Focal adhesion turnover. Current Opinion in Cell Biology. Elsevier.
- 24 Bibliographic review.** MAJ (AC). 2020. Cytoskeletal Control and Wnt Signaling-APC's Dual Contributions in Stem Cell Division and Colorectal Cancer. MDPI-Cancers. 12-12, pp.3811. <https://doi.org/10.3390/cancers12123811>
- 25 Bibliographic review.** MAJ; SP. 2016. The final cut: cell polarity meets cytokinesis at the bud neck in S. cerevisiae. Cellular and Molecular Life Science. 73-16, pp.3115-3136. scholar google (30) <https://doi.org/10.1007/s00018-016-2220-3>
- 26 Oral Talk.** MA. 2023. Cytoskeletal regulation in cell migration and invasion.

C.3. Research projects and contracts

- 1 Project.** PID2022-140899NB-I00, Flipping the coin: 'ActinG' for good – Targeting actin protrusions in invasion (FLIP-ACTIN). Ministerio de Ciencia e Innovación. Investigación. Juanes. (Centro de Investigación Príncipe Felipe). 01/10/2023-30/09/2026. 280.000 €. Principal investigator. Awarded 280.000,00euros + 4year salary for PhD student
- 2 Project.** CIDEAGENT2021/026, CIDEAGENT. Conselleria d'Educació i Cultura. Juanes. (Centro de Investigación Príncipe Felipe). 30/07/2022-29/07/2026. 619.979,63 €. Principal investigator. 399,979.63 € + 220,000.00 €, including 2 PhD student salary and PI salary for 4 years.
- 3 Project.** Investigation and modelling of cytoskeletal activity in APC mutated bowel cancer. Teesside University. M. Angeles Juanes. (National Horizons Centre). 10/2021-09/2025. 120.000 €. Principal investigator. Full PhD salary and fees covered by Teesside University for 4 years (22000GBP per year) + fees for PhD program + funding for reagents. Total personal in the project= 2, the PI and the awarded PhD stu...
- 4 Project.** ccf14-7167, POC09, Automated Morphological Characterisation of Hyphae (AMCH). Thyme Project Proof-of-Concept. Juanes Ortiz 1-PI. (National Horizons Centre-Teesside University). 01/07/2021-30/04/2022. 58.897 €. Principal investigator. PI