

CV Date	18/12/2023
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Part A. PERSONAL INFORMATION

First Name	Andrés		
Family Name	Clemente Blanco		
Sex	Not Specified	Date of Birth	
ID number Social Security, Passport			
URL Web	http://ibfg.es/en/andres-clemente-blanco-en		
Email Address			
Open Researcher and Contributor ID (ORCID)	0000-0002-3674-0671		

A.1. Current position

Job Title	Científico Titular de OPIs		
Starting date	2017		
Institution	Consejo Superior de Investigaciones Científicas		
Department / Centre			
Country	Spain	Phone Number	(0034) 923294887
Keywords	Molecular, cellular and genetic biology		

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

Period	Job Title / Name of Employer / Country
2014 - 2017	Contratado Ramón y Cajal / Consejo Superior de Investigaciones Científicas / Spain
2011 - 2013	Research Associate / Imperial College/European Research Council (ERC) / United Kingdom
2009 - 2010	Research Associate / Medical Research Council / United Kingdom
2007 - 2008	Postdoctoral Fellowship / Medical Research Council / Junta de Extremadura / United Kingdom
2006 - 2006	Research Associate / Medical Research Council / United Kingdom
2001 - 2005	FPI (Formacion Personal Investigador) / Junta de Extremadura / Spain
1999 - 2000	Investigador Contratado / Universidad de Extremadura / Spain

A.3. Education

Degree/Master/PhD	University / Country	Year
Official Doctorate Program in Microbiology	Universidad de Extremadura / Spain	2006
Degree in Biology. Fundamental Biology speciality	Universidad de Extremadura / Spain	1999

Part B. CV SUMMARY

I obtained my degree in Biology at the University of Extremadura (1994-1999) and soon after I was awarded with a Junta de Extremadura predoctoral fellowship to start my scientific career at professor Jaime Correa-Bordes's lab (University of Extremadura, 2001-2006). During this time I was focused on the link between cell cycle and morphogenesis, characterizing the effect of the mitotic Cdk activity on the ability of cells to grow apically or isotropically, and the dual role of the phosphatase Cdc14 as a CDK inhibitor and activator of cytokinesis. After my PhD I moved to professor Luis Aragon's lab at the Clinical Science Center in London (Medical Research Council, UK), where I obtained a position to work in DNA damage repair. We were determined to investigate how the Smc5/6 complex was recruited to a DNA lesion and its ability to enhance

DNA repair. At that time I was awarded with a Junta de Extremadura postdoctoral fellowship (2007-2008) to study the cell cycle transcriptional regulation of the RNA pol I complex. After my first postdoc, I obtained an MRC research assistant position (2009-2010), to analyze the transcriptional regulation of the RNA poly II complex. Soon after, I was granted with an Imperial College research associated position (funded by the ERC, 2011-2013) to work on the role of the cohesin complex in DNA damage. In 2014 I obtained a “Ramon y Cajal” position hosted by the Spanish National Research Council (CSIC) to run my own laboratory at the IBFG in Salamanca. In 2017 I obtained a tenure scientist position (Científico Titular) managed by the CSIC to still working at the IBFG premises. My actual research activity is focused in the role of different protein phosphatases in the repair of DNA lesions in order to maintain genome integrity.

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.** María Teresa Villoria; Facundo Ramos; Encarnación Dueñas; Peter Faull; Pedro Rodríguez Cutillas; (6/6) Andrés Clemente Blanco (AC). 2017. Stabilization of the metaphase spindle by Cdc14 is required for recombinational DNA repair. The EMBO Journal. 36-1, pp.79-101. ISSN 0261-4189. <https://doi.org/10.15252/embj.201593540>
- 2 **Scientific paper.** Marcelino Bermúdez López; Maria Teresa Villoria; Miguel Esteras; Adam Jarmuz; Jordi Torres Rosell; (6/7) Andrés Clemente Blanco; Luis Aragón. 2016. Sgs1 roles in DNA resection, HJ dissolution and crossover suppression require a two-step SUMO regulation dependent on Smc5/6. Genes and Development. ISSN 0890-9369. <https://doi.org/10.1101/gad.278275.116>
- 3 **Scientific paper.** Jonai García Luis; (2/4) Andrés Clemente Blanco; Luis Aragón Alcaide; Félix Machín. 2014. Cdc14 targets the holliday junction resolvase Yen1 to the nucleus in early anaphase. Cell Cycle. Landes Bioscience. 13-9, pp.1392-1399. <https://doi.org/10.4161/cc.28370>
- 4 **Scientific paper.** Adrián Campos; Facundo Ramos; Lidia Iglesias; Celia Delgado; Eva Merino; Esperilla Muñoz Antonio; Correa Bordes Jaime; Clemente Blanco Andrés. 2023. Cdc14 phosphatase counteracts Cdk-dependent Dna2 phosphorylation to inhibit resection during recombinational DNA repair. Nature Communications. 12;14(1)-2738.
- 5 **Scientific paper.** Facundo Ramos; Laura Durán; Mar Sánchez; Adrián Campos; David Hernández Villamor; Francisco Antequera; Andrés Clemente Blanco. 2021. Genome sequencing reveals new roles for Sgs1, Exo1, Rad51 and Srs2 factors in DNA repair by homologous recombination. Cell Reports. 38(2)-110201.
- 6 **Scientific paper.** Maria Teresa Villoria; Pilar Gutierrez Escribano; Esmeralda Alonso Rodriguez; et al; Andrés Clemente Blanco. 2019. PP4 phosphatase cooperates in recombinational DNA repair by enhancing double-strand break end resection. Nucleic Acids Research. 18;47-20, pp.10706-10727.
- 7 **Book chapter.** Facundo Ramos; Joanne Leonard; (3/4) Andrés Clemente Blanco; Luis Aragón. 2016. Cdc14 and chromosome condensation: methods to evaluate condensin function. Methods in Molecular Biology. Springer. 1505, pp.229-243. ISSN 1940-6029. https://doi.org/10.1007/978-1-4939-6502-1_17
- 8 **Review.** Araceli González Jiménez; Adrián Campos; Francisco Navarro; Andrés Clemente Blanco; Olga Calvo. 2021. Regulation of eukaryotic RNAPs activities by phosphorylation. Frontiers in Molecular Biosciences. 25-8, pp.681865.
- 9 **Review.** Adrián Campos; Andrés Clemente Blanco. 2020. Cell cycle and DNA repair regulation in the damage response: Protein phosphatases take over the reins. International Journal of Molecular Sciences. 21(2)-446.

- 10 Review.** Pedro Antonio San Segundo; Andrés Clemente Blanco. 2020. Resolvasas, dissolvases, and helicases in homologous recombination: Clearing the road for chromosome segregation. *Genes*. 11(1)-71.
- 11 Review.** Facundo Ramos; Maria Teresa Villoria; Esmeralda Alonso Rodríguez; Eva Merino; Adrián Campos; Andrés Clemente Blanco. 2019. Role of protein phosphatases PP1, PP2A, PP4 and Cdc14 in the DNA damage response. *Cell Stress*. 21-3, pp.70-85.
- 12 Review.** Andrés Clemente Blanco. 2017. Nucleolar condensation: a new mechanism to control mitotic exit. *Current Biology*. 27(22)-R1220:R1222. <https://doi.org/10.1016/j.cub.2017.10.016>

C.2. Conferences and meetings

- 1 Andrés Clemente Blanco. Cdc14 phosphatase inhibits resection to facilitate recombinational DNA repair. 13^a reunión de la Red Nacional de Levaduras. Red Española de Levaduras. 2022. Spain.
- 2 Adrián Campos; Celia Delgado Zahinos; Lydia Iglesias; Andrés Clemente Blanco. Cdc14 phosphatase counteracts Cdk-dependent Dna2 phosphorylation to timely inhibit resection during recombinational DNA repair. 2nd International Symposium on Cell Division and Genome Dynamics. INSTITUTO DE BIOLOGIA FUNCIONAL Y GENOMICA. 2022. Spain.
- 3 Andrés Clemente Blanco. Cdc14 phosphatase inhibits resection to facilitate recombinational DNA repair. 2nd International Symposium on Cell Division and Genome Dynamics. INSTITUTO DE BIOLOGIA FUNCIONAL Y GENOMICA. 2022. Spain.
- 4 Lydia Iglesias; Adrián Campos; Celia Delgado Zahinos; Andrés Clemente Blanco. Discordant read pairs analysis: a new genomic approach to study DNA repair. 2nd International Symposium on Cell Division and Genome Dynamics. INSTITUTO DE BIOLOGIA FUNCIONAL Y GENOMICA. 2022. Spain.
- 5 Celia Delgado Zahinos; Adrián Campos; Lydia Iglesias; Andrés Clemente Blanco. Recombinational DNA repair efficiency decreases in the presence of multiple DNA lesions at different genomic regions. 2nd International Symposium on Cell Division and Genome Dynamics. INSTITUTO DE BIOLOGIA FUNCIONAL Y GENOMICA. 2022. Spain.
- 6 Antonio Esperilla Muñoz; Guadalupe Bermejo Pulido; Antonia Ciudad; Lidia Pulido Diaz; Encarnación Dueñas; Andrés Clemente Blanco; Carlos Vazquez de Aldana; Jaime Correa Bordes. Asymmetric regulation of the Nrg1 repressor during maintenance of hyphal growth. XV Congreso Nacional de Micología. Sociedad Española de Micología. 2022. Spain.
- 7 Celia Delgado Zahinos; Adrián Campos; Lydia Iglesias; Andrés Clemente Blanco. Analysis of PP2A phosphatase in response to DNA damage. 44^o Congreso Nacional de la Sociedad Española de Bioquímica y Biología Molecular. Sociedad Española de Bioquímica y Biología Molecular. 2022. Spain.
- 8 Adrián Campos; Celia Delgado Zahinos; Lydia Iglesias; Andrés Clemente Blanco. Cdc14 inhibits DNA resection by dephosphorylating the nuclease Dna2. 44^o Congreso Nacional de la Sociedad Española de Bioquímica y Biología Molecular. Sociedad Española de Bioquímica y Biología Molecular. 2022. Spain.
- 9 Lydia Iglesias Sánchez; Adrián Campos; Celia Delgado Zahinos; Andrés Clemente Blanco. The spatial regulation of Cdc14 in response to a DNA lesion is required for DNA repair. 44^o Congreso Nacional de la Sociedad Española de Bioquímica y Biología Molecular. Sociedad Española de Bioquímica y Biología Molecular. 2022. Spain.
- 10 Cdc14 phosphatase facilitates recombinational DNA repair by avoiding DNA2 over-resection. 43 Congreso de la Sociedad Española de Bioquímica y Biología Molecular. Sociedad Española de Bioquímica y Biología Molecular. 2021.
- 11 PP4 phosphatase enhances recombinational DNA repair by stimulating DNA end resection. 1st CABIMER international workshop. Centro Andaluz de Biología Molecular y Medicina Regenerativa. 2020. Spain.
- 12 A new role for the Cdc14 phosphatase in the repair of a DNA lesion. 12^a Reunión de la red española de levaduras. Red española de levaduras. 2019.
- 13 PP4 phosphatase enhances recombinational DNA repair by stimulating DNA end resection. 41 Congreso de la Sociedad Española de Bioquímica y Biología Molecular. Sociedad española de bioquímica y biología molecular. 2018. Spain.

- 14 Maria Teresa Villoria; Facundo Ramos; Eva Merino; Andrés Clemente Blanco. The double-edge sword of the DNA damage checkpoint. 11^a Reunión Bienal de la Red Española de Levaduras. Red Española de Levaduras. 2017. Spain.
- 15 Facundo Ramos Ochoa; Maria Teresa Villoria López; Encarnación Dueñas; Andrés Clemente Blanco. Cdc14 is released from the nucleolus under DNA damage and is required for DNA repair by homologous recombination. XXXIX Congreso de la Sociedad Española de Bioquímica y Biología Molecular. SEBBM. 2016. Spain. 'Participatory - poster. Conference.
- 16 Facundo Ramos Ochoa; Maria Teresa Villoria López; Encarnación Dueñas; Andrés Clemente Blanco. The importance of the mitotic spindle integrity in DNA reappear. XXXIX Congreso de la Sociedad Española de Bioquímica y Biología Molecular. SEEBM. 2016. Spain. Participatory - invited/keynote talk. Conference.
- 17 María Teresa Villoria López; Facundo Ramos Ochoa; Encarnación Dueñas; Andrés Clemente Blanco. The spindle-stabilizing function of Cdc14 is required to promote recombinational DNA repair. XXXIX Congreso de la Sociedad Española de Bioquímica y Biología Molecular. Sociedad española de bioquímica y biología molecular. 2016. Spain. 'Participatory - poster. Conference.
- 18 Maria Teresa Villoria; Facundo Ramos; Encarnación Dueñas; Peter Faull; Pedro Cutillas; Andrés Clemente Blanco. Stabilization of the metaphase spindle by Cdc14 is required for recombinational DNA repair. 10^a Reunión bienal de la Red Española de levaduras. Red Española de Levaduras. 2018. Spain.
- 19 Facundo Ramos; Maria Teresa Villoria; Encarnación Dueñas; Andrés Clemente Blanco. Cdc14 is required for DNA repair by homologous recombination. XL Congreso de la Sociedad Española de Genética. Sociedad Española de Genética. 2015. Spain.
- 20 Maria Teresa Villoria; Facundo Ramos; Encarnación Dueñas; Andrés Clemente Blanco. The spindle-stabilization function of Cdc14 is required to promote recombinatorial DNA repair. XL Congreso de la Sociedad Española de Genética. Sociedad Española de Genética. 2015. Spain.

C.3. Research projects and contracts

- 1 **Project.** Estudio del papel de las proteínas fosfatasa en la reparación de lesiones en el ADN y en estabilidad genómica. Andrés Clemente Blanco. (INSTITUTO DE BIOLOGIA FUNCIONAL Y GENOMICA). 01/10/2022-31/08/2025. 193.600 €.
- 2 **Project.** PGC2018-097963-B-I00, Analisis molecular y funcional de las fosfatasa Cdc14 y PP4 durante la respuesta a una lesión en el ADN. Ministerio de Ciencia e Innovación. Universidades. (Consejo Superior de Investigaciones Científicas). 2019-2021. 137.698 €. Principal investigator.
- 3 **Project.** BFU2016-77081-P, Importancia de las proteínas fosfatasa en la regulación espacial de lesiones en el ADN. Programa estatal de fomento de la investigación científica y técnica de excelencia. (Consejo Superior de Investigaciones Científicas). 2017-2018. 120.000 €. Principal investigator.
- 4 **Project.** BFU2013-41216-P, Importance of protein phosphatases in DNA damage repair and genome stability. Programa estatal de fomento de la investigación científica y técnica de excelencia. Andrés Clemente Blanco. (Consejo Superior de Investigaciones Científicas). 2014-2016. 193.600 €. Principal investigator.