

CV Date	11/02/2022
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## Part A. PERSONAL INFORMATION

First Name	FERNANDO		
Family Name	CALVO BALTANÁS		
Sex	Male	Date of Birth	
ID number Social Security, Passport			
URL Web			
Email Address	fcalvo@us.es		
Open Researcher and Contributor ID (ORCID)	0000-0001-8110-0991		

### A.1. Current position

Job Title	Profesor Contratado Doctor		
Starting date	2022		
Institution	Universidad de Sevilla		
Department / Centre	Fisiología Medica y Biofísica / Instituto de Biomedicina de Sevilla		
Country	Spain	Phone Number	
Keywords			

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

Period	Job Title / Name of Employer / Country
2021 - 2022	Postdoctoral researcher / FUNDACION DE INVESTIGACION DEL CANCER
2019 - 2021	Postdoctoral researcher / Junta de Castilla y León
2017 - 2019	Postdoctoral researcher / Instituto de Salud Carlos III
2015 - 2017	Postdoctoral researcher / Fundación Alfonso Martin Escudero
2013 - 2014	Postdoctoral Researcher / Junta de Castilla y León
2010 - 2013	Postdoctoral Researcher / Junta de Castilla y León
2009 - 2010	Postdoctoral Researcher / Junta de Castilla y León

### A.3. Education

Degree/Master/PhD	University / Country	Year
PhD	Universidad de Salamanca	2009
Official program in Neuroscience	Universidad de Salamanca	2006
Master Thesis	Universidad de Salamanca	2005
Bachelor in Biochemistry	Universidad de Salamanca	2004

## Part B. CV SUMMARY

### 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

- Scientific paper.** Baltanas FC; Natasha Zarich; Jose Maria Rojas Cabañeros; Eugenio Santos. (1/4). 2020. SOS GEFs in Health and Disease BBA Reviews on Cancer. Elsevier. pp.188445. ISSN 0304- 419X.
- Scientific paper.** Pilar Liceras Boillos; David Jimeno; Rosula Garcia Navas; et al; Baltanas FC (AC);. (12/13). 2018. Differential role of the RasGEFs Sos1 and Sos2 in mouse skin homeostasis and carcinogenesis Mol Cell Biol. ASM. 00049-18. ISSN 0270-7306. WOS (2)

- 3 **Scientific paper.** Silke Gerboth; Emanuela Frittoli; Andrea Palamidessi; et al; Baltanas Fc;. (4/19). 2018. Phosphorylation of SOS1 on tyrosine 1196 promotes its RAC GEF activity and contributes to BCR-ABL leukemogenesis. *Leukemia*. Nature publicaciones. 32-3, pp.820-827. ISSN 0887-6924.
- 4 **Scientific paper.** Pilar Liceras Boillos; Rosula Garcia Navas; Alicia Ginel Picardo; et al; Baltanas FC (AC);. (10/11). 2016. Sos1 disruption impairs cellular proliferation and viability through an increase in mitochondrial oxidative stress in primary MEFs *Oncogene*. Nature Publishing Group. 35-50, pp.6389-6402. ISSN 0950-9232. WOS (11)
- 5 **Scientific paper.** Baltanas FC; MARTIN PEREZ ANDRES; ALICIA GINEL PICARDO; et al;. (1/10). 2013. Functional Redundancy of Sos1 and Sos2 for Lymphopoiesis and Organismal Homeostasis and Survival. *Molecular and Cellular Biology*. ASM. 33-22, pp.4562-4578. ISSN 0270-7306. WOS (22)
- 6 **Scientific paper.** Baltanas FC; Maria Teresa Berciano; Jorge Valero; Carmela Gomez; David Diaz; Jose Ramon Alonso; Miguel Lafarga; Eduardo Weruaga. (1/8). 2013. Differential glial activation during the degeneration of Purkinje cells and mitral cells in the PCD mutant mice. *Glia*. wiley. 61-2, pp.254-272. ISSN 0894-1491. WOS (12)
- 7 **Scientific paper.** Gomez C; Curto GG; Baltanas FC; et al; Alonso JR. (3/9). 2012. Changes in the serotonergic system and in BDNF distribution in the main olfactory bulb of PCD mice before and after mitral cell loss *Neuroscience*. 201, pp.20-33. ISSN 0306-4522. WOS (3)
- 8 **Scientific paper.** Baltanas FC; IÑIGO CASAFONT; EDUARDO WERUAGA PRIETO; JOSE RAMON ALONSO PEÑA; MARIA TERESA BERCIANO; MIGUEL LAFARGA COSCOJUELA. (1/6). 2011. Nucleolar disruption and Cajal body disassembly are nuclear hallmarks of dna damage-induced neurodegeneration in Purkinje cells *Brain Pathology*. WILEY-BLACKWELL PUBLISHING. 21, pp.374-388. ISSN 1015-6305. WOS (53)
- 9 **Scientific paper.** Baltanas FC (AC); Berciano MT; Santos E; Lafarga M. (1/4). 2021. The Childhood-Onset Neurodegeneration with Cerebellar Atrophy (CONDCA) disease caused by AGTPBP1 gene mutations: The Purkinje cell degeneration mouse as an animal model for the study of this human disease *Biomedicines*. MDPI. ISSN 2227-9059.
- 10 **Scientific paper.** Baltanas FC (AC); Garcia-Navas R; Santos E. (1/3). 2021. SOS2 Comes to the Fore: Differential Functionalities in Physiology and Pathology *International Journal of Molecular Sciences*. MDPI. 22, pp.6613. ISSN 1422-0067.
- 11 **Scientific paper.** Garcia-Navas R; Liceras-Boillos P; Gomez C; Baltanas FC; Nuevo-Tapióles C; Cuezva J; Calzada N; Santos E. (4/8). 2021. Critical requirement of SOS1 RAS-GEF function for mitochondrial dynamics, metabolism and redox homeostasis *Oncogene*. Springer Nature Group. ISSN 0950-9232.
- 12 **Scientific paper.** Baltanas FC (AC); Mucientes-Valdivieso M; Lorenzo-Martin LF; et al; Santos E. (1/11). 2021. Functional Specificity of the Members of the Sos Family of Ras-GEF Activators: Novel Role of Sos2 in Control of Epidermal Stem Cell Homeostasis *Cancers*. MPDI. ISSN 2072-6694.
- 13 **Scientific paper.** Castle M; Baltanas FC; Kovacs I; Nagahara A; Barba D; Tuszynski MH. (2/6). 2020. Postmortem Analysis in a Clinical Trial of AAV2-NGF Gene Therapy for Alzheimer's Disease Identifies a Need for Improved Vector Delivery *Human Gene Therapy*. ISSN 1043-0342.
- 14 **Scientific paper.** Baltanas FC; Maria T Berciano; Olga Tapia; et al;. (1/9). 2019. Nucleolin reorganization and nucleolar stress in Purkinje cells of mutant PCD mice *Neurobiology of disease*. Elsevier. 127, pp.312-322. ISSN 0969-9961.
- 15 **Scientific paper.** Sabine Suire; Baltanas Fc; Anne Segonds-Pichon; Keith Davidson; Eugenio Santos; Phil Hawkins; Len Stephens. (2/7). 2019. TNFalpha and GM-CSF1 priming augments the role of SOS1/2 in driving activation of Ras, PI3K? and neutrophil proinflammatory responses *Journal of Leukocyte Biology*. ISSN 0741-5400.
- 16 **Scientific paper.** Baltanas FC; Jorge Valero; Jose Ramon Alonso; Maria Teresa Berciano; Miguel Lafarga. (1/5). 2015. Nuclear Signs of pre-neurodegeneration *Methods in Molecular Biology*. Humana Press/Springer Science+Business Media. 1254, pp.43-54. ISSN 0091-679X. WOS (3)

- 17 Scientific paper.** David Diaz; Carmela Gómez; Rodrigo Muñoz Castañeda; Baltanas Fc; José Ramón Alonso; Eduardo Weruaga. (4/6). 2013. The olfactory system as a puzzle: playing with its pieces Anatomical Record. Wiley. 296, pp.1383-1400. ISSN 1932-8486. WOS (2)
- 18 Scientific paper.** Baltanas FC; Iñigo Casafont; Vanesa Lafarga; Eduardo Weruaga; Jose Ramon Alonso; Maria Teresa Berciano; Miguel Lafarga Coscojuela. (1/7). 2011. Purkinje cell degeneration in pcd mice reveals large-scale chromatin reorganization and gene silencing linked to defective dna repair Journal of Biological Chemistry. AMER SOC BIOCHEMISTRY MOLECULAR BIOLOGY INC. 286, pp.28287-28302. ISSN 0021-9258. WOS (36)
- 19 Scientific paper.** Recio JS; Alvarez Dolado M; Diaz D; Baltanas FC; Gil Piquer M; Alonso JR; Weruaga E. (4/7). 2011. Bone marrow contributes simultaneously to different neural types in the central nervous system through different mechanisms of plasticity Cell Transplantation. COGNIZANT COMMUNICATION CORP. 20, pp.1179-1192. ISSN 0963-6897. WOS (8)
- 20 Scientific paper.** David Diaz; Javier Sanchez Recio; Baltanas FC; Carmela Gomez; Eduardo Weruaga Prieto; Jose Ramon Alonso. (3/6). 2011. Long-lasting changes on the anatomy of the olfactory bulb after ionizing irradiation and bone marrow transplantation Neuroscience. PERGAMON-ELSEVIER SCIENCE LTD. 26, pp.190-205. ISSN 0306-4522. WOS (12)
- 21 Scientific paper.** Baltanas FC; Gloria Gonzalez Curto; Carmela Gomez Rodriguez; et al;. (1/10). 2011. Types of Cholecystokinin-containing periglomerular cells in the mouse olfactory bulb Journal of Neuroscience Research. WILEY-LISS. 89, pp.35-43. ISSN 0360-4012. WOS (5)
- 22 Scientific paper.** Baltanas FC; Eduardo Weruaga; Azucena Rodrigo Murias; Carmela Gomez; Gloria Gonzalez Curto; Jose Ramon Alonso Peña. (1/6). 2009. Chemical characterization of pax6-immunoreactive periglomerular neurons in the mouse olfactory bulb. Cellular and Molecular Neurobiology. SPRINGER/PLENUM PUBLISHERS. 29, pp.1081-1085. ISSN 0272-4340. WOS (7)
- 23 Scientific paper.** David Diaz; Jorge Valero; Carmen Airado; Baltanas FC; Eduardo Weruaga; Jose Ramon Alonso. (4/6). 2009. Sexual dimorphic stages affect both proliferation and serotonergic innervation in the adult rostral migratory stream Experimental Neurology. ELSEVIER. 216, pp.357-364. ISSN 0014-4886. WOS (13)
- 24 Scientific paper.** Baltanas FC; Eduardo Weruaga; Jorge Valero; Javier Sanchez; Jose Ramon Alonso. (1/5). 2009. Albumin attenuates dna damage in primary-cultured neurons Neuroscience Letters. ELSEVIER. 450, pp.23-26. ISSN 0304-3940. WOS (8)
- 25 Scientific paper.** Carmen Airado; Carmela Gomez; Javier Sanchez Recio; Fernando Calvo Baltanas; Eduardo Weruaga; Jose Ramon Alonso. (4/6). 2008. Zincergic innervation from the anterior olfactory nucleus to the olfactory bulb displays plastic responses after mitral cell loss Journal of Chemical Neuroanatomy. ELSEVIER. 36, pp.197-208. ISSN 0891-0618. WOS (3)
- 26 Scientific paper.** Angel Porteros; Carmela Gomez; Jorge Valero; Baltanas FC; Jose Ramon Alonso. (1/5). 2007. Chemical organization of the macaque monkey olfactory bulb: iii. distribution of cholinergic markers Journal of Comparative Neurology. WILEY INTERSCIENCE. 501, pp.854-865. ISSN 0021-9967. WOS (7)
- 27 Scientific paper.** Baltanas FC; eduardo weruaga prieto; carmen airado cerrato; jorge valero gomez-lobo; javier sanchez recio; david diaz lopez; jose ramon alonso peña. (1/7). 2007. Chemical heterogeneity of the periglomerular neurons in the olfactory bulb European Journal of Anatomy. SOCIEDAD DE ANATOMIA ESPAÑOLA. 11, pp.123-147. ISSN 2340-311X.
- 28 Encyclopaedia article.** (1/1). 2021. SOS Family and Ras-GEFs Encyclopedia. MDPI. ISSN 2309-3366.
- 29 Book chapter.** Jose ramon Alonso; Carmela Gomez; Jorge Valero; Javier Sanchez Recio; Baltanas FC; Eduardo Weruaga. (5/6). 2007. Investigación en neurobiología del síndrome de Asperger. Últimos resultados en investigación Síndrome de Asperger: un enfoque multidisciplinar. Asociacion Asperger Andalucía; Consejería de Salud de la Junta de Andalucía. 1, pp.25-38. ISBN 978-84-690-6606-5.

**30 Book chapter.** Carmen Airado; Maria Vidal; Baltanas FC; et al;. (3/9). 2006. Plasticidad en el sistema olfatorio adulto. en: la olfacción en España La olfacción en España. SBI, S.L.. 1, pp.193-207. ISBN 84-933858-5-9.

### C.3. Research projects and contracts

- 1 Project.** Las proteínas Sos como dianas terapéuticas en el tratamiento del adenocarcinoma de pulmón causado por mutaciones en KRAS. Fundación Samuel Solorzano Barruso. Fernando Calvo Baltanas. (Universidad de Salamanca). 01/01/2021-01/01/2022. 1.876,23 €.
- 2 Project.** SOS family of RasGEFs as therapeutic targets in RAS-driven tumors (COMPETITIVO). Fundación Ramón Areces. Eugenio Santos. (Centro de Investigación del Cáncer). 01/01/2019-01/01/2022. 129.357 €. Team member.
- 3 Project.** Functional specificity and characterization of Sos and Grf families of RasGEFs as biomarkers and therapeutic targets (COMPETITIVO). Junta de Castilla y León. Eugenio Santos. (Centro de Investigación del Cáncer). 01/01/2018-31/12/2020. 120.000 €. Team member.
- 4 Project.** SOS proteins as therapeutic targets in lung adenocarcinoma (COMPETITIVO). Fundación Samuel Solorzano Barruso. Fernando Calvo Baltanas. (Centro de Investigación del Cáncer). 01/01/2019-01/01/2020. 1.740 €. Principal investigator.
- 5 Project.** Sos- and Grf-mediated Ras oncoproteins activation and their involvement in normal and tumoral development. Validation as biomarkers and/or therapeutic target (COMPETITIVO). Instituto de Salud Carlos III. EUGENIO SANTOS DE DIOS. (Instituto de Biología Molecular y Celular del Cáncer de Salamanca). 01/01/2014-31/12/2016. 161.500 €. Team member.
- 6 Project.** Sos and grf families of ras-gef activators as markers and targets in normal and tumoral development (COMPETITIVO). EUGENIO SANTOS DE DIOS. (Instituto de Biología Molecular y Celular del Cáncer de Salamanca). 01/01/2014-31/12/2015. 35.000 €. Team member.
- 7 Project.** Sos proteins as therapeutic target in Chronic Myeloid Leukemia (COMPETITIVO). CONSEJERIA DE SANIDAD. JUNTA DE CASTILLA Y LEON. BIO/SA03/14. (Centro de Investigación del Cáncer). 01/01/2014-31/12/2014. 25.110 €. Team member.
- 8 Project.** Mechanisms of functional specificity of Ras oncoproteins and their specific cellular activators, gefs, in physiological and pathological processes (COMPETITIVO). Instituto de Salud Carlos III. EUGENIO SANTOS DE DIOS. (Instituto de Biología Molecular y Celular del Cáncer de Salamanca). 01/09/2010-01/01/2014. Team member.
- 9 Project.** Role of Sos proteins in the development and maturation of T and B lymphocytes (COMPETITIVO). SAMUEL SOLORZANO-BARRUSO. EUGENIO SANTOS. (Instituto de Biología Molecular y Celular del Cáncer de Salamanca). 01/01/2013-31/12/2013. 6.714 €. Team member.
- 10 Project.** Role of Ras oncoproteins activators: Sos1 and Rasgrf in physiological processes and their relationship with human pathologies (COMPETITIVO). FUNDACION SAMUEL SOLORZANO BARRUSO. ALBERTO FERNANDEZ MEDARDE. (Instituto de Biología Molecular y Celular del Cáncer de Salamanca). 01/01/2012-31/12/2012. 5.500 €. Team member.