

CV Date	24/11/2022
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Part A. PERSONAL INFORMATION

First Name *	PEDRO JOSÉ		
Family Name *	REAL LUNA		
Sex *		Date of Birth *	
ID number Social Security, Passport *		Phone Number *	
URL Web			
Email Address	pedroreal@ugr.es		
Researcher's identification number	Open Researcher and Contributor ID (ORCID) *	0000-0001-7968-5353	
	Researcher ID		
	Scopus Author ID	35875903000	

A.1. Current position

Job Title	Associate Professor/Principal Investigator		
Starting date	2022		
Institution	University of Granada: GENyO Centre for Genomics and Oncological Research: Pfizer-University of Granada-Andalusian Regional Government		
Department / Centre	Biochemistry and Molecular Biology I/ Faculty of Sciences		
Country	Spain	Phone Number	
Keywords			

A.3. Education

Degree/Master/PhD	University / Country	Year
Biochemistry, Molecular Biology and Biomedicine	Universidad de Cantabria	2005
Degree in Biochemistry	Universidad de Granada	1999

A.4. General quality indicators of scientific production

Nr. of Doctoral Thesis: 3

Nr. of Master's Thesis: 17

Nr. of Degree's Thesis: 12

Total citations: 5475*

Last five years citations: 1964*

h-index: 25*

i10-index : 42*

Nr. of publications in Q1: 49/55

Nr. of First author: 9/55

Nr. of First author and corresponding author: 2/55

Nr. of Last author publications: 9/55

Part B. CV SUMMARY

Dr Pedro José Real Luna holds a degree in Biochemistry from University of Granada and a PhD from the University of Cantabria. He completed his PhD period in the laboratory of Dr José Luis Fernández Luna in the Molecular Genetics Unit of the Marqués de Valdecilla University Hospital in Santander, Spain. He studied the effect of chemotherapy in the transcriptional regulation of apoptosis mediators in breast cancer. During this period he was first author and co-author of 8 publications in major journals in the field of Oncology and Molecular Biology.

In 2005, Dr. Real joined the laboratory of Dr Adolfo A. Ferrando in the Institute for Cancer Genetics at Columbia University in New York, NY, USA. During his postdoctoral period he

focused on the understanding of the molecular mechanisms responsible for T-cell Acute Lymphoblastic Leukemia (T-ALL) development. In Ferrando's lab he participated in 8 publications, three as first author or co-author, and one patent. These publications have helped to elucidate the role of NOTCH1 and TLX1 proteins in the establishment and the response to chemotherapy in T-ALL patients.

In April 2009, Dr Real joined the laboratory of Dr Pablo Menéndez in the Andalusian Stem Cell Bank (BACM) in Granada, Spain. From February 2010 to January 2017 Dr. Real has been a Miguel Servet Researcher of the National Institute of Health Carlos III leading his own line of research focused on the molecular regulators of human hematopoietic development. From July 2013, Dr Real is Principal Investigator from the Gene Regulation, Stem Cells and Development laboratory in GENyO, Granada, Spain.

Dr. Real is Associate Professor from University of Granada at the Department of Biochemistry and Molecular Biology I in the Faculty of Science in few weeks, maintaining his position as Principal Investigator in GENyO. In addition, Dr. Real teaches Biochemistry in the Degree in Biology and Degree in Biochemistry from University of Granada and participates as Professor and Invited Professor in the Master of Translational Research and Personalized Medicine (TransMed) and the Master of Regenerative Biomedicine at University of Granada.

Dr. Real has participated in 55 scientific publications in international journals and more than 50 contributions to national and international meetings. Dr Real has led 13 research projects, participated in 3 patents and has formed graduate students, doctoral students and postdoctoral researchers.

Part C. RELEVANT ACCOMPLISHMENTS

C.1. Publications (last 10 years)

- 1 **Scientific paper**. Domingo-Reines J; Martinez-Navajas G; Montes R; et al; Ramos-Mejia V. 2022. Frontiers Cellular Developmental Biology Generation of a H9 Clonal Cell Line With Inducible Expression of NUP98-KDM5A Fusion Gene in the AAVS1 Safe Harbor Locus. *Frontiers*. 10, pp.846092.
- 2 **Scientific paper**. Sanabria de la Torre; Martinez-Heredia L; Gonzalez-Salvatierra S; et al; Real PJ; Garcia-Fontana B. (10/13). 2022. Characterization of genetic variants of uncertain significance for the ALPL gene in patients with adult hypophosphatasia *Frontiers in Endocrinology*. Nature Publishing Group. 9-1, pp.9569.
- 3 **Scientific paper**. Yan Q; Wulfridge P; Doherty J; Fernandez-Luna JL; Real PJ; Tang HY; Sarma K. 2022. Proximity labeling identifies a repertoire of site-specific R-loop modulators *Nature Communications*. Nature Publisher Group. 13-1, pp.53.
- 4 **Scientific paper**. Rodriguez-Martinez A; Simon-Saez I; Perales S; et al; Serrano MJ. 2021. Exchange of cellular components between platelets and tumor cells: impact on tumor cells behavior *Theranostics*. Ivyspring. 12-5, pp.2150-2161.
- 5 **Scientific paper**. Cortijo-Gutiérrez M; Sánchez-Hernández S; Tristán-Manzano M; et al; Real PJ; Benabdellah K. (6/10). 2021. Improved Functionality of Integration-Deficient Lentiviral Vectors (IDLVs) by the Inclusion of IS2 Protein Docks. *Pharmaceutics*. 13-8, pp.1217. <https://doi.org/10.3390/pharmaceutics13081217>
- 6 **Scientific paper**. Simon I; Perales S; Casado-Medina L; et al; Real PJ. (15/15). 2021. Cross-Resistance to Abiraterone and Enzalutamide in Castration Resistance Prostate Cancer Cellular Models Is Mediated by AR Transcriptional Reactivation Cancers. *MDPI*. 13-6, pp.1483.
- 7 **Scientific paper**. Lamolda M; Montes R; Simon I; et al; Real PJ (AC). (15/15). 2019. GENYOi005-A: an induced pluripotent stem cells (iPSCs) line generated from a patient with Familial Platelet Disorder with associated Myeloid Malignancy (FPDMM) carrying a p.Thr196Ala variant *Stem Cell Research*.
- 8 **Scientific paper**. Garcia-Fontana C; Villa-Suarez JM; Andujar-Vera F; et al; Real PJ; Muñoz-Torres M. (6/10). 2019. Epidemiological, Clinical and genetic study of Hypophosphatasia in a Spanish population: Identification of 2 novel mutations in the ALPL gene *Scientific Reports*. Nature Publishing Group. 9-1, pp.9569.
- 9 **Scientific paper**. Montes R; Mollinedo P; Perales S; Gonzalez-Lamuño D; Ramos-Mejia V; Fernandez-Luna JL; Real PJ (AC). (7/7). 2019. GENYOi004-A: An induced pluripotent stem

cells (iPSCs) line generated from a patient with autism-related ADNP syndrome carrying a pTyr719* mutation. *Stem Cell Research*. Elsevier.

- 10 **Scientific paper**. Bueno C; Calero Nieto FJ; Wang X; et al; Real PJ; Menendez P. (8/17). 2019. Enhanced hemato-endothelial specification during human embryonic differentiation through developmental cooperation between AF4-MLL and MLL-AF4 fusions. *Haematologica*. Ferrata Storti Foundation.
- 11 **Scientific paper**. Mollinedo P; Kapitansky O; Gonzalez-Lamuño D; Zaslavsky A; Real PJ; Gozes I; Gandarillas A; Fernandez-Luna JL. (5/8). 2018. Cellular and animal models of skin alterations in the autism-related ADNP syndrome *Scientific Reports*. Nature Publishing Group.
- 12 **Scientific paper**. Sanchez-Hernandez S; Gutierrez-Guerrero A; Martin-Guerra R; et al; Real PJ; Benabdellah K. (14/18). 2018. The IS2 Element Improves Transcription Efficiency of Integration-Deficient Lentiviral Vector Episomes. *Molecular Therapy Nucleic Acids*. Elsevier. 13, pp.16-28.
- 13 **Scientific paper**. Navarro-Montero O; Ayllon V; Lamolda M; et al; Real PJ (AC). (14/14). 2017. RUNX1c Regulates Hematopoietic Differentiation of Human Pluripotent Stem Cells Possibly in Cooperation with Proinflammatory Signaling. *Stem Cells*. Willey Online Library.
- 14 **Scientific paper**. Lopez-Ruiz E; Venkateswaran S; Perán M; et al; Real PJ; Marchal JA. (12/16). 2017. Poly(ethylmethacrylate-co-diethylaminoethyl acrylate) coating improves endothelial re-population, bio-mechanical and anti-thrombogenic properties of decellularized carotid arteries for blood vessel replacement. *Scientific Reports*. Nature Publishing Group. 7-1, pp.407.
- 15 **Scientific paper**. Lopez-Onieva L; Lamolda M; Montes R; Lozano ML; Vicente V; Rivera J; Ramos-Mejia V; Real PJ (AC). (8/8). 2017. Induced pluripotent stem cells from Bernard-Soulier Syndrome patient's peripheral blood cells with a p.Phe55Ser mutation in the GPIX gene. *Stem Cell Research*. Elsevier. 20-1, pp.10-13.
- 16 **Scientific paper**. Lopez-Onieva L; Machuca M; Lamolda M; et al; Real PJ (AC). (9/9). 2016. Generation of a human induced pluripotent stem cell (iPSC) line from a Bernard-Soulier syndrome patient with the mutation p.Asn45Ser in the GPIX gene. *Stem Cell Research*. Elsevier. 17-3, pp.603-606.
- 17 **Scientific paper**. Gonzalez-Pozas F; Montes R; Lopez-Onieva L; Romero T; Domingo-Renes J; Real PJ; Ramos-Mejia V; Ayllon V. (6/8). 2016. Generation of human pluripotent stem cell lines with suppressed expression of the notch ligand DLL4 using shorthairpin RNAs *Stem Cell Research*. Elsevier. 16-3, pp.735-739.
- 18 **Scientific paper**. Lopez-Onieva L; Montes R; Lamolda M; et al; Real PJ (AC). (10/10). 2016. Generation of induced pluripotent stem cells (iPSCs) from a Bernard-Soulier syndrome patient carrying a W71R mutation in the GPIX gene *Stem Cell Research*. Elsevier. 16-3, pp.692-695.
- 19 **Scientific paper**. Toscano MG; Muñoz P; Sánchez-Gilabert A; et al; Real PJ; Martin F. (8/13). 2016. Absence of WASP Enhances Hematopoietic And Megakaryocytic Differentiation In A Human Embryonic Stem Cell Model. *Molecular Therapy*. 24-2, pp.342-352.
- 20 **Scientific paper**. Montes R; Romero T; Cabrera S; Lopez-Escamez JA; Ramos-Mejia V; Real PJ (AC). (6/6). 2015. Generation and characterization of the human iPSC line PBMC1-iPS4F1 from adult peripheral mononuclear cells. *Stem Cell Research*.
- 21 **Scientific paper**. Toscano MG; Navarro-Montero O; Ayllon V; et al; Real PJ (AC). (12/12). 2015. SCL/TAL1-mediated transcriptional network enhances megakaryocytic specification of human embryonic stem cells. *Molecular Therapy*. 23-1, pp.158-170.
- 22 **Scientific paper**. Cabrera S; Ji AR; Frejo L; Ramos-Mejia V; Romero T; Real PJ; Lopez-Escamez JA. (6/7). 2015. Generation of human iPSC line GRX-MCiPS4F-A2 from adult peripheral blood mononuclear cells (PBMCs) with Spanish genetic background. *Stem Cell Research*. 15-2, pp.337-340.
- 23 **Scientific paper**. Ayllon V; Ramos Mejia V; Bueno C; et al; Real PJ; Menendez P. (6/11). 2015. The Notch ligand DLL4 specifically marks human hematoendothelial progenitors and regulates its hematopoietic versus endothelial fate *Leukemia*. 29-8, pp.1741-1753.
- 24 **Scientific paper**. Ramos-Mejia V; Navarro-Montero O; Ayllon V; Bueno C; Romero T; Real PJ; Menendez P. (6/7). 2014. HOXA9 promotes hematopoietic commitment of human

embryonic stem cells Blood.

- 25 **Scientific paper.** Montes R; Ayllón V; Prieto C; et al; Real PJ; Menendez P. (7/ 12). 2014. Ligand-independent FLT3 activation does not cooperate with MLL-AF4 to immortalize/transform cord blood CD34+ cells. *Leukemia*.
- 26 **Scientific paper.** Bueno C; Ayllón V; Montes R; et al; Real PJ; Menendez P. (6/ 9). 2013. FLT3 activation cooperates with MLL-AF4 fusion protein to abrogate the hematopoietic specification of human ESCs. *Blood*.
- 27 **Scientific paper.** Real PJ (AC); Navarro-Montero O; Ramos-Mejía V; Ayllón V; Bueno C; Menendez P. (1/6). 2013. The role of RUNX1 isoforms in hematopoietic commitment of human pluripotent stem cells *Blood*.
- 28 **Scientific paper.** Bueno C; Montes R; Melen GJ; et al; Real PJ; Menendez P. (5/ 16). 2012. A human ESC model for MLL-AF4 leukemic fusion gene reveals an impaired early hematopoietic-endothelial specification. *Cell Research*. 22-6, pp.986-1002.
- 29 **Scientific paper.** NavarroNavarro-Montero O; Romero-Moya D; Montes R; Ramos-Mejía V; Bueno C; Real PJ; Menendez P. (6/7). 2012. Intrahepatic transplantation of cord blood CD34+ cells into newborn NOD/SCID-IL2R?(null) mice allows efficient multi-organ and multi-lineage hematopoietic engraftment without accessory cells. *Clinical Immunology*. 145-2, pp.89-91.
- 30 **Scientific paper.** Sánchez L; Gutierrez-Aranda I; Ligeró G; et al; Real PJ; Menendez P. (6/ 9). 2012. Maintenance of human embryonic stem cells in media conditioned by human mesenchymal stem cells obviates the requirement of exogenous basic fibroblast growth factor supplementation. *Tissue Eng Part C Methods*. 18-5, pp.387-396.
- 31 **Scientific paper.** Ramos-Mejía V; Montes R; Bueno C; Ayllón V; Real PJ; Rodríguez R; Menendez P. (5/7). 2012. Residual expression of the reprogramming factors prevents differentiation of iPSC generated from human fibroblasts and cord blood CD34+ progenitors. *PLoS One*. 7-4.
- 32 **Scientific paper.** Real PJ (AC); Ligeró G; Ayllón V; et al; Menendez P. (1/ 9). 2012. SCL/TAL1 regulates hematopoietic specification from human embryonic stem cells. *Molecular Therapy*. 20-7, pp.1443-1453.
- 33 **Scientific paper.** Muñoz P; Toscano MG; Real PJ; et al; Martín F. (3/10). 2012. Specific marking of hESCs-derived hematopoietic lineage by WAS-promoter driven lentiviral vectors. *PLoS One*. 7-6.

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

- 1 Pedro José Real Luna; Miguel García Toscano; Pablo Menéndez Buján; Francisco Martín Molina; Óscar Navarro Montero; Verónica Ayllón Cases; Verónica Ramos Mejía; Marién Cobo Pulido; Clara Bueno Uroz; Tamara Romero Escobar. PCT/ES2014/070805. Method to produce megakaryocytes and platelets Spain. 24/10/2013. FUNDACION PUBLICA ANDALUZA PROGRESO Y SALUD.
- 2 Pablo Menendez Buján; Verónica Ramos Mejía; Clara Bueno Uroz; Pedro J. Real Luna; Gertrudis Ligeró; Laura Sánchez; Iván Gutierrez Aranda. PCT/ES2011/070236. Use of a conditioned medium from Human Mesenchymal Stem Cells to differentiate human Pluripotent Stem Cells Spain. 08/04/2010. FUNDACION PUBLICA ANDALUZA PROGRESO Y SALUD.
- 3 Pedro J. Real Luna; Adolfo A. Ferrando. PCT/US2008/003268. Synergistic Interaction of NOTCH-1 Inhibitors with Glucocorticoids. United States of America. 13/03/2007. Columbia University.