

CV Date

05/08/2025

Part A. PERSONAL INFORMATION

First Name	Pedro José		
Family Name	Real Luna		
Sex		Date of Birth	
ID number Social Security, Passport			
URL Web			
Email Address			
Open Researcher and Contributor ID (ORCID)			

A.1. Current position

Job Title	Profesor Titular de Universidad		
Starting date	2022		
Institution	University of Granada: GENyO Centre for Genomics and Oncological Research: Pfizer-University of Granada-Andalusian Regional Government		
Department / Centre			
Country		Phone Number	
Keywords	240300 - Biochemistry		

A.3. Education

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

Part B. CV SUMMARY

Dr Pedro José Real holds a degree in Biochemistry from University of Granada and a PhD from the University of Cantabria. His doctoral research took place in the Molecular Genetics Unit of the Marqués de Valdecilla University Hospital in Santander, Spain under the guidance of Dr José Luis Fernández Luna. His thesis consisted on 3 first-author publications: Real PJ et al. Oncogene 2002; Real PJ et al. Cancer Res 2004 and Real PJ et al. Cancer Res 2005. In addition, he also was first author of another article and co-author of 4 publications in leading journals within the fields 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. In Ferrando's lab he participated in 8 publications, three as first author or co-author, and one patent: Real PJ et al. Nat Med 2009 that also generated an international patent (PCT/ US2008/003268), Real PJ & Ferrando AA

Leukemia 2009; De Keersmaecker K*, Real PJ*, Della Gatta G* et al. Nat Med.

In April 2009, Dr Real joined the laboratory of Dr Pablo Menéndez in the Andalusian Stem Cell Bank (BACM) in Granada, Spain for his second postdoctoral period. There he led his own line of research focused on the role of SCL/TAL1 and RUNX1 in human embryonic hematopoiesis: Real PJ et al. Mol Ther 2012 and Real PJ et al. Blood 2013. Furthermore, he collaborated with the other member of Menéndez's group and established several collaborations with researchers at BACM and GENyO generating 13 additional publications and one patent (PCT/ES2011/070236).

Since July 2013, Dr Real is the Principal Investigator from the Gene Regulation, Stem Cells and Development lab in GENyO, Granada, Spain. He continued with his previous research line focused on human embryonic hematopoiesis: Toscano MG et al. Mol Ther 2015 that generated a patent (PCT/ES2014/070805) and Navarro-Montero O et al. Stem Cells 2017. In addition, Dr Real opened new research lines: 1) Generation of New Disease Cellular Models through Cellular Reprogramming (Montes R et al. Stem Cell Res 2015 & Stem Cell Res 2019; Lamolda M et al. Stem Cell Res 2019) taking special interest in Bernard-Soulier Syndrome (LopezOnieva L et al. Stem Cell Res 2016, 2016bis & 2017; Martinez-Navajas G et al. Mol Ther Nucleic Acids 2023); 2) New cellular models for Castration Resistant Prostate Cancer: Simon I et al. Cancers 2021 and Simon I et al. 2025 (Submitted); 3) Intercellular molecular communication between platelets and cancer cells: Rodriguez-Martinez A*, Simon I* et al. Theranostics 2022, Ceron-Hernandez J et al. 2025 (Submitted) and Ceron-Hernandez J et al. 2025 (Submitted); 4) Interplay of Extracellular vesicles in communication between platelets and cancer cells (Sanchez-Mañas JM et al. Extracell Vesicles Circ Nucleic Acids 2024 and Sanchez-Mañas JM et al. Biomolecules 2025 (submitted)). Moreover, has established productive collaborations with national and international research groups.

Nowadays, Dr Real is Associate Professor from University of Granada at the Dept. of Biochemistry and Molecular Biology I in the Faculty of Science, maintaining his position as Principal Investigator in GENyO. In addition, Prof. Real teaches in the Degree in Biochemistry, Master of Translational Research and Personalized Medicine and the Master of Tissue Engineering at University of Granada.

Prof. Real has participated in 61 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 the establishment of a spin-off from University of Granada (Evostem Theranostics S.L.). Moreover, Prof. Real has formed graduate students (18 TFGs), master students (18 TFM), PhD students (4 theses supervised and 2 theses on development) and postdoctoral researchers.

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. Ceron-Hernandez J; Martinez-Navajas G; Sanchez-Manas JM; et al; (11/11) Real PJ (AC). 2025. Oncogenic KRASG12D Transfer from Platelet-like Particles Enhances Proliferation and Survival in Non-Small Cell Lung Cancer Cells. International Journal of Molecular Sciences. MDPI. 26-7. ISSN 1422-0067. <https://doi.org/10.3390/ijms26073264>
- 2 Scientific paper. Martinez-Navajas G; Ceron-Hernandez J; Simon I; et al; (15/15) Real PJ (AC). 2023. Lentiviral Gene Therapy reverts GPIX expression and phenotype in Bernard-Soulier Syndrome Type C. Molecular Therapy Nucleic Acids. Elsevier. 33, pp.75-92. <https://doi.org/10.1016/j.omtn.2023.06.008>
- 3 Scientific paper. Simon I; Perales S; Sanchez-Manas JM; Martinez-Navajas G; Ceron-Hernandez J; (6/6) Real PJ (AC). 2025. Cross-resistance to alternative second-line Apalutamide treatment in Castration Resistance Prostate Cancer cellular models. International Journal of Molecular Sciences. MDPI.
- 4 Scientific paper. Domingo-Reines J; Montes R; Garcia-Moreno A; et al; Ramos-Mejia V; (12/14) Real PJ. 2023. Cell Death & Disease. The pediatric leukemia oncoprotein NUP98-KDM5A induces genomic instability that may facilitate malignant transformation. Nature Publishing Group. 14-6, pp.357. <https://doi.org/10.1038/s41419-023-05870-5>
- 5 Scientific paper. Domingo-Reines J; Martinez-Navajas G; Montes R; et al; Ramos-Mejia V; (11/12) Real PJ. 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. <https://doi.org/10.3389/fcell.2022.846092>
- 6 Scientific paper. Sanabria de la Torre; Martinez-Heredia L; Gonzalez-Salvatierra S; et al; Garcia-Fontana B; (10/13) Real PJ. 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. <https://doi.org/10.3389/fendo.2022.863940>
- 7 Scientific paper. Rodriguez-Martinez A; Simon-Saez I; Perales S; et al; Serrano MJ; (13/15) Real PJ. 2022. Exchange of cellular components between platelets and tumor cells: impact on tumor cells behavior. Theranostics. Ivyspring. 12-5, pp.2150-2161. <https://doi.org/10.7150/thno.64252>
- 8 Scientific paper. Yan Q; Wulfridge P; Doherty J; Fernandez-Luna JL; (5/7) 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. <https://doi.org/10.1038/s41467-021-27722-6>
- 9 Scientific paper. Cortijo-Gutiérrez M; Sánchez-Hernández S; Tristán-Manzano M; et al; Benabdellah K; (6/10) Real PJ. 2021. Improved Functionality of Integration-Deficient Lentiviral Vectors (IDLVs) by the Inclusion of IS2 Protein Docks. Pharmaceuticals. 13-8, pp.1217. <https://doi.org/10.3390/pharmaceutics13081217>
- 10 Scientific paper. Simon I; Perales S; Casado-Medina L; et al; (12/12) Real PJ (AC). 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. <https://doi.org/10.3390/cancers13061483>

- 11 Bibliographic review. Sanchez Mañas JM; Perez de Gracia N; Perales S; Martinez-Galan J; Torres-Perales C; (6/6) Real PJ (AC). 2024. Potential clinical applications of extracellular vesicles in pancreatic cancer: exploring untapped opportunities from biomarkers to novel therapeutic approaches. Extracell Vesicles Circ Nucleic Acids. OAE Publishing Inc.. 5-2, pp.180-200. ISSN 2767-6641. <https://doi.org/10.20517/evcna.2023.68>

C.3. Research projects and contracts

- 1 Project. PID2023-152099OB-I00, Platelet and tumor derived extracellular vesicles (EVs) as directors of carcinogenesis and metastasis in pancreatic cancer (EVprofiler). Ministerio de Ciencia e Innovación. Universidades. Pedro J. Real Luna. (Universidad de Granada: GENyO Centre for Genomics and Oncological Research: Pfizer-University of Granada-Andalusian Regional Government). 01/09/2024-31/08/2028. 187.500 €. Principal investigator.
- 2 Project. Papel de la comunicación mediada por vesículas extracelulares (EVs) entre células tumorales de cáncer de páncreas y plaquetas en la carcinogénesis y metástasis (C-EXP-174-UGR23). Universidad de Granada. Torres Perales C. (Universidad de Granada: GENyO Centre for Genomics and Oncological Research: Pfizer-University of Granada-Andalusian Regional Government). 01/01/2024-31/12/2026. 18.000 €. Team member.
- 3 Project. PID2019-110153RB-I00, New animal models and therapeutic tools to cure Bernard-Soulier Syndrome. Ministerio de Ciencia e Innovación. Universidades. Pedro J. Real Luna. (Universidad de Granada: GENyO Centre for Genomics and Oncological Research: Pfizer-University of Granada-Andalusian Regional Government). 01/06/2020-31/05/2024. 133.100 €. Principal investigator.
- 4 Project. B-CTS-676-UGR20, New animal models and therapeutic tools to cure Bernard-Soulier Syndrome. Universidad de Granada. Pedro J. Real Luna. (Universidad de Granada: GENyO Centre for Genomics and Oncological Research: Pfizer-University of Granada-Andalusian Regional Government). 01/07/2021-30/06/2023. 40.000 €. Principal investigator.
- 5 Project. RYC-2015-18382. Ministerio de Economía, Industria y Competitividad. Pedro J. Real Luna. (Universidad de Granada: GENyO Centre for Genomics and Oncological Research: Pfizer-University of Granada-Andalusian Regional Government). 01/02/2017-31/01/2022. 308.600 €. Principal investigator.
- 6 Project. NANO3DEVICES: Nanosistema multifuncionalizado con aplicación Teranóstica en Cancer (DTS18/00121). Instituto de Salud Carlos III. (Universidad de Granada: GENyO Centre for Genomics and Oncological Research: Pfizer-University of Granada-Andalusian Regional Government). 01/01/2019-31/12/2020. 78.650 €. Team member.
- 7 Project. PI16/01340, Desarrollo de estrategias de Terapia Génica-Celular para el tratamiento del Síndrome de Bernard-Soulier. National Health Institute Carlos III. Pedro J. Real Luna. (Universidad de Granada: GENyO Centre for Genomics and Oncological Research: Pfizer-University of Granada-Andalusian Regional Government). 01/01/2017-31/12/2020. 110.715 €. Principal investigator.
- 8 Contract. Platelets derived Microparticles direct pancreatic carcinogenesis and metastasis and serves as Noninvasive source of early detection and disease progression in pancreatic cancer

(PMProfiler) Fundación Roberto Arnal Planelles. Delgado R.
01/07/202101/07/2024. 45.000 €.

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 Ligerio; 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.