

Part A. PERSONAL INFORMATION

CV date 01/09/2022

Name and Surname	Pedro Medina Vico		
ID number		Age	
Researcher's identification number	Researcher ID	D-1688-2013	
	ORCID	0000-0002-7834-7093	
Personal webpage as teaching professor: https://www.ugr.es/~pedromedina/teaching		Group webpage: http://www.cancer.ugr.es/	

A.1. Current position

University/Institution	Universidad de Granada		
Department	Dept. Bioquímica y Biología Molecular I		
Address and Country	Facultad de Ciencias, Campus Fuente Nueva.		
Phone number	+34 958 715 500	Email:	pedromedina@ugr.es
Current position	Tenured profesor (ANECA catedrático-certified), Group Leader CTS-993		

A.3. Education

Bachelor/Master/PhD	University	Year
Graduate/Bachelor degree	Granada, www.ugr.es	2001
Doctorate	Autónoma de Madrid, www.uam.es	2006
Postdoctoral training	CNIO, www.cnio.es	2006-2007
Postdoctoral training	Universidad de Yale, www.yale.edu	2007-2011

Part B. CV SUMMARY (max. 5000 characters, including spaces)


Pedro P. Medina graduated from the University of Granada with honors (last 3 courses with the maximum possible GAP of 4.00/4.00). Medina got the Ph.D. at the Autonomous University of Madrid. His thesis "*Estudio Genético y Molecular de Genes Implicados en la Carcinogénesis Pulmonar*" with European mention was awarded the national award for the best thesis in biomedicine by the Royal Academy of Doctors of Spain. After a year of a postdoctoral period at the National Center for Oncological Research (CNIO), Pedro did a postdoctoral training of 5-years at Yale University studying the role of microRNAs in cancer in the laboratory of Professor Frank Slack (now Director of RNA Medicine Institute at Harvard School of Medicine). After considering job offers at Karolinska Institute and MD Anderson Pedro returned to Spain in 2012 applying to *Miguel Servet* and *Ramon y Cajal* programs. Pedro was ranked as #1 among the 235 candidates of the *Miguel Servet* Program and with a score of 99.5/100 in the *Ramon y Cajal* program. Pedro is currently group leader of the CTS-993 group approved by PAIDI in 2014 in the Center for Genomics and Oncology Research (GenyO). During his career, Pedro has been invited as a speaker to more than thirty centers in the USA, Germany, Switzerland, Singapore, or Spain some of which has been keynote talk (Berlin, 2010) or Chair of the Session (International Liquid Biopsy, 2016). Pedro has published articles in prestigious international journals, more than half as first author or correspondence, including *Nature*, *Cancer Cell*, *Nature Methods*, *Blood*, *Journal of Clinical Oncology*, *Leukemia*, *Blood Cancer Journal*, *Journal of Hematology & Oncology*, *Oncogene*, *Human Molecular Genetics*, *Human Mutation*, *Journal of Pathology*, *Clinical Epigenetics*, *Cellular Oncology*, *Cancer Epidemiol Biomarkers Prevention*, *Journal of Proteomics*, *Genes Chromosomes & cancer*, *Cell cycle*, etc. On the academic side, Pedro is a tenured professor (ANECA Catedrático-certified) at Biochemistry & Molecular Biology Dept. at the University of Granada teaching in the grades of Biology, Biochemistry, and Biotechnology. Additionally, Pedro has taught in 9 different official master courses from 6 different Universities. Pedro has carried out an intense task of tutoring young researchers with more than 80 financed activities some of which have been awarded (*Certamen Universitario Arquímedes*, organized by the Ministry of Education of Spain), including international visit students from Universities from France, USA, Germany, Austria, Slovenia and Russia. Currently Pedro Medina is a member of the advisory council of the [Hope Funds For Cancer Research](#), New Port (RI, USA) and director of the [Director of the Chair "Heroes contra la Leucemia" of the University of Granada](#).

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (just a selection, full list in <http://orcid.org/0000-0002-7834-7093>).

- Gallardo A., et al. EZH2 endorses cell plasticity to carcinoma cells facilitating mesenchymal to epithelial transition and tumour colonization. *Oncogene* 2022 (D1, IF=10).
- Esposito R., et al. Multi-hallmark long noncoding RNA maps reveal non-small cell lung cancer vulnerabilities. *Cell Genomics* 2022.
- Peinado P., et al **Medina PP** ☒. Multi-omic alterations of the SWI/SNF complex define a clinical subgroup in lung adenocarcinoma. *Clinical Epigenetics* 2022 (Q1, IF=7,3).
- Andrades A., et al **Medina PP** ☒. Recurrent splice site mutations affect key diffuse large B-cell lymphoma genes. *Blood* 2022 (D1, IF=25,5, ranked #1 journal in Hematology).
- Boyero L., et al **Medina PP** ☒. PKP1 and MYC create a feedforward loop that links transcription and translation in squam cell lung cancer. *Celular Oncology* 2022 (D1, IF=7,1).
- Cuadros M. et al. Acceleration of the DNA methylation clock among lynch syndrome-associated mutation carriers. *BMC Medical Genomics* 2022.
- Arenas AM. et al **Medina PP** ☒. Opportunities of miRNAs in cancer therapeutics. Book Chapter of MicroRNA in Human Malignancies. Elsevier 2022. ISBN: [595657.2022](#).
- Jeffrey R. Haswell et al. Genome-wide CRISPR interference screen identifies long non-coding RNA loci required for differentiation and pluripotency. *Plos one*. 2021.
- Peinado P., et al **Medina PP** ☒. The SWI/SNF complex regulates the expression of miR-222, a tumor suppressor microRNA in lung adenoc. *Human Molecular Genetics* (Q1, IF=6.1).
- Romero O.A., et al. SMARCA4 deficient tumours are vulnerable to KDM6A/UTX and KDM6B/JMJD3 blockade. *Nature Communications* 2021 (D1, IF=15).
- Cuadros M., et al **Medina PP** ☒. LncRNA-mRNA co-expression analysis identifies AL133346.1/CCN2 as biomarkers in pediatric B-cell ALL. *Cancers* 2020; (Q1, IF=6.6).
- Peinado P., et al **Medina PP**. Comprehensive analysis of SWI/SNF inactivation in lung adenocarcinoma cell models. *Cancers* 2020; (Q1, IF=6.6).
- Baliñas-Gavira C., et al Jose A. Martínez-Climent, Almudena R. Ramiro, **Medina PP** ☒. Frequent mutations in the amino-terminal domain of BCL7A impair its tumor suppressor role in DLBCL. *Leukemia* 2020 (D1, IF=11.5).
Article awarded with the prize of the Real Academia de Medicina de Andalucía (RAMAO).
- LncRNA DLG2-AS1 acts as biomarker in lung adenocarcinoma. Molina A, et al **Medina PP** ☒ *Cancers*. 2020. 12(8), 2080 (Q1, IF=6,6).
- Martín-Padrón J. et al **Medina PP** ☒. Plakophilin 1 enhances MYC expression, promoting squamous cell lung cancer. *Oncogene* 2020. (D1, IF=10).
Article featured in the special issue: The best of Oncogene.
- Cuadros M. et al **Medina PP** ☒. Expression of the long non-coding RNA TCL6 is associated with clinical outcome in pediatric B-cell acute lymphoblastic leukemia. *Blood Cancer* (D1, IF=11).
Article featured in the special issue: The best of Blood Cancer Journal 2019.
Article featured in the "article of the month" Sept 2020 by the SEBBM.
Article awarded with Official College of Physicians of Granada Award.
- Peinado P, et al **Medina PP** ☒. Long non-coding RNAs as cancer biomarkers. Book chapter of *Cancer and Non-coding-RNAs*, Ed: Elsevier International. ISBN: [9780128110225](#).
- Herrera A, et al **Medina PP** ☒. Long non-coding RNA FENDRR and FOXF1 gene: new biomarkers in lung cancer. *Oncotarget* 2017.
- Conde C, et al **Medina PP** ☒ [...] Preoperative chemo radiotherapy for rectal cancer: The sensitizer role of miR-375 and c-Myc association. *Oncotarget* 2017.
- Cuadros M, et al **Medina PP** ☒. BRG1 regulation by miR-155 in human leukemia cell lines. *Clin Transl Oncol*. 2017.
- Coira IF et al and **Medina PP** ☒. Expression inactivation of *SMARCA4* by microRNAs in lung tumors. *Human Molecular Genetics* 2015.
- Schiaffino-Ortega S. et al and **Medina PP** ☒. SWI/SNF proteins as target in cancer therapy. *Journal of Hematology & Oncology* 2014.

- Muñoz-Lopez M, **Medina PP**, Garcia-Perez JL. Wiping methylation: Wip1 regulates genomic fluidity on cancer. *Cancer Cell*. 2013.
- Palma P, Cuadros M, et al **Medina P**. Microarray profiling of mononuclear peripheral blood cells identifies novel candidate genes related to chemoradiation response in rectal cancer. *PLoS One*. 2013.
- Rufino-Palomares EE, et al, **Medina PP** ✉. MicroARNs as oncogenes and tumor Suppressors. Chapter #14 of “*MicroRNAs in Medicine*” ISBN: 978-1-118-30039-8. Wiley Ed. January, 2014
- Chen PY [...] **Medina PP** et al. FGF regulates TGFβ signaling and endothelial-to-mesenchymal transition via control of *let-7* miRNA expression. *Cell Reports* 2012.
- **Medina P.P.**, Mona Nolde and Frank J. Slack. OncomiR addiction in an in vivo model of microRNA-induced pre-B cell lymphoma. *Nature*. 2010 Sep 2;467(7311):86-90. PMID: 20693987.
 - Article awarded with the Basic Research Award of the Yale Cancer Center 2010.
 - Recommended by Faculty of 1000 as mandatory reading article [faculty opinions \(f1000\)](#).
 - Classified in the 1% of the most cited papers in the area of *clinical medicine* according to Essential Science indicator form ([Thomson Reuters WOK/Clarivate Analytics](#)).
- **Trang P. (*) Medina PP. (*)** et al. Regression of murine lung tumors by the *let-7* microRNA. *Oncogene*. 2010. *: 1st authorship shared. [Highly cited article \(>500 cites\)](#).
- **Medina PP**, Slack FJ. Blocking miRNAs *in vivo*. *Nature Methods*. 2009.

 As of March/April 2020, this **highly cited paper** received enough citations to place it in the top 1% of the academic field of Clinical Medicine based on a highly cited threshold for the field and publication year.

Data from *Essential Science Indicators*

C.2. Congress: 195 scientific communications in total (AACR, IASLC, ASCO, etc), 52 as speaker in centers including MD Anderson, Yale University, Rutgers University, CSI Singapore, University of Geneva, IRB Mainz, IRB-Barcelona, CNIO-Madrid, CRG-Barcelona, etc. Remarkably, **our scientific communications have obtained more than ten awards in different meetings**, the last of them “*Best Oral Communication*) in the 3rd Education ASEICA meeting (November 23-25, 2021), or the “*EACR prize for the best scientific poster*” in the 18th ASEICA international congress (November 2022).

C3 Research projects as Principal Investigator / Supervisor (selection)

- *Estudio de las implicaciones del gen BCL7A en el desarrollo tumoral*. Entity: *Fundación BBVA (Becas Leonardo)*. Length: 2014-2015. Funds: 39,900€ (competitive basis). 56 grants were awarded out of a total of 1664 applicants, success rate 3%.
- *Involvement of microRNAs in haematological malignancies*. Entity: Deutsche JC Leukämie-Stiftung (FIJC 2011 F 11/01). Length: 2014-2017. Funds: 150,000\$.
- *Gene Expression Regulation and Cancer*. Entity: European Commission, Marie Curie Integration Grant. (FP7-PEOPLE-2012, Proposal 321926). Length: 2014-2016. Funds: 100,000 €.
- *ARID1B mouse mutant generation*. Entity: INFRAFRONTIER-I3 (EU contract Grant Agreement Number 312325 of the EC FP7 Capacities Specific Programme). Granted by competition.
- *Cromatina, ARN no Codificante y Cáncer*. (SAF2015-67919-R). Entity: Spanish Government. Length: 2016-2019. Funds: 130,000€. Co-IP: Marta Cuadros.
- *Nuevos tratamientos farmacológicos antitumorales basados en la actividad del complejo SWI/SNF (CS2016-3)*. Entity: Andalusian Government. Length: 2017-2018. Funds: 15,000€.
- *Pilot study for the development of new therapeutic strategies based on new gene-editing technologies*. Entity: *FERO Foundation*. Length: 2018-2019. Funds: 10,000€.
- *New therapies for lung cancer based on gene-editing technologies*. Entity: *The International Association for the Study of Lung Cancer (IASLC)*. Length: 2018-2019. Funds: 50,000\$.
- *Exploring new therapies for lung cancer (LabAECC2018)* Entity: *Asociación Española Contra el Cáncer (AECC)*. Length: 2018-2022. Funds: 300,000€.
- *Study the therapeutic and preventive potential of targeting oncogenic mutations with CRISPR-CAS9 technology*. (H2020-MSCA-IF-2018, # 837897). Entity: European Commission. Length: 2019-2021, Funds: 160,932 €. Fellow: JC Alvarez-Perez. Entity: *Comision Europea*.

- EurOPDX (European Union's Horizon 2020 research and innovation program, grant agreement no. #731105) II call for free-of-charge Access to patient-derived xenografts and hands-on training.
- *Development of experimental and pre-clinical therapeutic strategies for acute myeloid leukemia* (PI-0135-2020). Entity: Andalusian Government. Length: 2021-2023. Funds: 143,750€.
- *The role of chromatin remodeling complexes in hematological malignancies* (P20_00688). Entity: Andalusian Government. Length: 2021-2022, Funds: 70,000€.
- *New therapeutic opportunities based on genetic precision medicine* (P32/2202/001). Entity: Oficina de Transferencia de la Universidad de Granada. Length: 2021-2023, Funds: 15,000€.
- *Development of experimental and pre-clinical therapeutic strategies for lung squamous cell carcinoma* (PIGE-0213-2020). Entity: Andalusian Government. Length: 2021-2023, Funds: 123,750€. Co-IP: María Isabel Rodríguez Lara.
- *Molecular and functional characterization of new lung cancer drivers* (PI-0203-2022). Entity: Andalusian Government. Length: 2023-2026. Funds: 120,000€. Co-IP: Ana Matía.
- *Dissecting the role of SWI/SNF complex in human pathology* (PID2021-126111OB-I00). Entity: Spanish Government. Length: 2023-2026. Funds: 240,000€.

C.3B Research projects as a collaborator: 17 projects of different national and international entities.

C.4 Patents:

- 2020 "*BCL7A for use in the diagnosis, prognosis, prevention, improvement, relief or treatment of diffuse large B-cell lymphoma and methods, kits and devices based on said use*" Reference: P202030634. Owner entity: SAS/UGR. Principal Inventor: Pedro P. Medina.
- 2020 "*Biomarkers for diagnosis, prognosis, prevention, improvement, relief or treatment of pediatric b-cell acute lymphoblastic leukemia*" Reference: P202031253. Owner entity: UGR. Principal Inventor: Pedro P. Medina.

C.5 Merits and Awards (Selection):

- 2021 [Manuel Villasante Award of Scientific Excellence Research](#) (all scientific areas).
- 2020 [Director of the Chair "Heroes contra la Leucemia" of the University Granada](#). leucemiainfantil.ugr.es.
- 2017 **Young Investigator Award** granted by the **Association for the Study of Lung Cancer** (IASLC.org).
- 2017 Tutor of the Álvaro Andrades's research work that was **awarded in the XVI Certamen Arquímedes** organized by the Ministry of Education of Spain in the 2017 edition.
- 2014 **Young Award from the Foundation Universidad Complutense de Madrid**, for the best career in Science and Technology of a Spaniard or resident in Spain less than 36 years of age. Reason for concession according to the jury: "*For his exceptional personal trajectory and leadership in the field of oncological research, highlighting the work on the first model of oncogenic addiction in vivo of a non-coding protein gene, published in 2010 in the journal Nature, milestone that founds new anti-tumor research based on the search for inhibitors of microRNAs.*"
- 2014 **Lindau Nobel Laureate Fellow:** Selected for representing Spain to attend the Lindau, Germany in 2014 participated by 37 Nobel in Medicine and Physiology. Spain nominated 10 candidates from whom the international committee finally selected 6.
- 2013 **Awarded by the International Foundation BIAL** together with Professor George-Hyslop (University of Cambridge), Professor Cunha-Vaz (Professor at the University of Coimbra), Dr. Manel Esteller (Director of the PEBB). Award received by the President of Portugal, Aníbal Cavaco Silva, for a work of international excellence. Oporto.
- 2012 "**Andalucía Investigación**" Award for a promising research career.
- 2011 **Anti-cancer Foundation award** given by the San Francisco Javier and Santa Cándida Anticancer Charitable Foundation for the best work published by Spanish researchers in prestigious national or international journals in the field of basic or clinical oncology in 2010.
- 2010 **Inaugural speaker (keynote speaker) at the "Small RNAs" Symposium** of the III Meeting of the NGFN Program of Medical Genome Research (Berlin, Germany, 2010). Invited by Dr. Jürgen Brosius.
- 2007 **National Research Award 2006 awarded by the Royal Academy of Doctors of Spain** for the Best National Thesis in Biomedicine.