

Parte A. PERSONAL INFORMATION		CV date	07-10-2022
First and Family name	Francisco Martín Bermudo		
Social Security, Passport, ID number		AGE	
Researcher codes	Researcher ID	K-4197-2014	
	Código Orcid	0000-0002-5745-8704	

A.1. Current position

Name of University/Institution	University Pablo Olavide (UPO)-Andalusian Center of Molecular Biology and Regenerative Medicine (CABIMER)		
Department	Cell Therapy and Regeneration		
Address and country	Ctra. de Utrera km 1, 41013 Sevilla, Spain		
Phone number		email	
Current position	Full Professor	From	06-19-2007
Espec. cód. UNESCO	3206, 2411, 2410, 2407, 3309		
Keywords	Diabetes, NAFLD, Obesity, Nutrients, Gene Expression, Pancreatic Islets, Beta cell, Insulin, Antioxidants, Foods, Diets		

A.2. Education (title, institution, date)

PhD, Licensed, Graduate	University	Year
Degree in Medicine and Surgery	University of Seville	1986
Doctorate in Medicine and Surgery	University of Seville	1991

A.3. General indicators of quality of scientific production (see instructions)

- Official Scientific Recognition by the Spanish System (Sexenios): 7 (last granted in 2020).
- Number of supervised doctoral thesis during the last ten years: 8.
- Sum of times cited: 4837 cites.
- Average citations per year during the last five years (excluding current year): 292 cites/year.
- Number of publications in Q1: 85 (43 of them in D1).
- H-index (Publons): 38; H-index (google scholar): 39. Index i10: 76.

Part B. CV SUMMARY (max. 3500 characters, including spaces)

Francisco Martín Bermudo had a predoctoral FPI fellowship (1988; U. of Seville, School of Medicine). During this period, he enjoyed a research short-term stay with Prof. L. Best (Dept. of Medicine, U. of Manchester). In 1991, he defended his doctoral dissertation on the cytotoxic effects of immunosuppressants on pancreatic islets and their mechanisms of action. Then, he enjoyed a postdoctoral fellowship with Prof. M. White (Joslin Diabetes Center, Harvard University) working on insulin signaling (IRS proteins). From 1992 to 1997, he was a member of the Dept. of Physiology and Institute of Neurosciences (School of Medicine, U. of Alicante) under the figures of Postdoctoral Fellowship, Visiting Professor and Associate Professor. He research was focused in the process of the stimulus-secretion coupling in pancreatic β -cells, in response to nutrients and its role in diabetes physiopathology. In 1997, he moved, as an Associate Professor, to the Dept. of Applied Biology (U. Miguel Hernández) and then in 2001, he became a member of the Institute of Bioengineering (same University). At that time, he set up his own research group and he added two new research lines: i) the role of nutrients in gene expression and its relationship with diabetes and ii) the use of stem cells for diabetes cell therapy. Between 1997 and 2001, he carried out three short-term research stays at: i) the lab of Prof. A. Escobar (Center of Biophysics and Biochemistry; IVIC); ii) the lab of Prof. F. Ashcroft (Dept. of Physiology, U. of Oxford) and iii) the lab of Prof. P. Herrera (Dept. of Morphology, U. of Geneve). In 2005, he joined the U. Pablo Olavide where he set up a new research group (Group PAI BIO311 from Junta de Andalucía) and got the position of Full Professor in 2007. Since then, the overarching theme of his work is to investigate the role of nutrients and foods in the development of metabolic diseases. He is pursuing two major research lines: i) to elucidate

the impact of foods and nutrients in type 2 diabetes (T2DM) and non-alcoholic fatty liver disease (NAFLD) and ii) to understand the mechanisms of actions by which hypercaloric high-fat and high-carbohydrate diets promote the onset of T2DM and NAFLD. Between 2006 and 2007, he became a member, as principal investigator, of the Andalusian Center of Molecular Biology and Regenerative Medicine (CABIMER) and the CIBER of Diabetes and Associated Metabolic Diseases (CIBERDEM). In conclusion, he has published 136 (among papers and book chapters), he has been principal investigator of 28 research projects, he has 10 patents (4 of them are licensed) and 13 contracts with companies. Finally, he has been involved in 2 clinical trials.

Parte C. REVELANT MERITS (sorted by typology)

C.1. Publications

- 1.- Goikoetxea-Usandizaga N, Bravo M, Egia-Mendikute L, *et al*, Martín F* and Martínez-Chantar ML*. (2023) The outcome of boosting mitochondrial activity in alcoholic liver disease (ALD) is organ-dependent. *Hepatology*. DOI: 10.1097/HEP. 000000000000303. IF: 17,425 (41 authors; 40/41). (*Corresponding authors).
- 2.- Romero-Gómez M, Aller R, Martín F. Dietary recommendations for the management of non-alcoholic fatty liver disease (NAFLD): a nutritional geometry perspective. *Seminars in Liver Disease*. DOI: 10.1055/s-0042-1757711. IF: 6,155 (3 authors; 3/3).
- 3.- Arroyo N, Villamayor L, Diaz I, *et al*, Rojas A. (2021) GATA4 induces liver fibrosis regression by deactivating hepatic stellate cells. *J. Clin. Invest Insights*. DOI: 10.1172/jci.insight.150059. IF: 8,315 (11 authors; 9/11).
- 4.- Alvarez-Amor L, Luque-Sierra A, Cardenas A, *et al*, Martin F. (2021) Extra virgin olive oil improved body weight and insulin sensitivity in high fat diet-induced obese LDLr^{-/-}.Leiden mice without attenuation of steatohepatitis. *Scientific Reports*. DOI: 10.1038/s41598-021-87761-3. IF: 4,576 (17 authors).
- 5.- Simón J, Goikoetxea-Usandizaga N, Serrano-Maciá M, *et al*, Martínez-Chantar ML. (2021) Magnesium accumulation upon cyclin M4 silencing activates microsomal triglyceride transfer protein improving NASH. *J. Hepatol*. DOI: 10.1016/j.jhep.2021.01.043. IF: 20,582 (32 authors; 22/32).
- 6.- Gea-Botella S, Agullo L, Marti N, *et al*, Valero M. (2020) Carotenoids from persimmon juice processing. *Food Res Int*. DOI: 10.106/j.foodrs.2020.109882. IF: 4,972 (9 authors; 6/9).
- 7.- Jurado-Ruiz E, Alvarez-Amor L, Berna G, *et al*, Martin F. (2019) Extra virgin olive oil diet intervention improves insulin resistance and islet performance in diet-induced diabetes in mice. *Scientific Reports*. DOI: 10.17235/REED.2018.6083/2018. IF: 4,122 (10 authors).
- 8.- Luque-Sierra A, Alvarez-Amor L, Kleemann R, Martin F* and Varela LM*. (2018) Extra virgin olive oil with natural phenolic content exerts an anti-inflammatory effect in adipose tissue and attenuates the severity of atherosclerotic lesions in Ldlr^{-/-} Leiden mice. *Mol Nutr Food Res*. DOI: 10.1002/mnfr.201800295. IF: 4,323 (*Corresponding authors).
- 9.- Hornero-Méndez D, Cerrillo I, Ortega Á, *et al*, Fernández-Pachón MS. (2018) β-Cryptoxanthin is more bioavailable in humans from fermented orange juice than from orange juice. *Food Chem* 262. Doi: 10.1016/j.foodchem.2018.04.083. IF: 4,529 (7 authors; 6/7).
- 10.- Ortega Á, Berná G, Rojas A, Martín F, Soria B. (2017) Gene-Diet Interactions in Type 2 Diabetes: The Chicken and Egg Debate. *Int J Mol Sci*. 18. Doi: 10.3390/ijms18061188. IF: 3,541.
- 11.- Jurado-Ruiz E, Varela LM, Luque A, *et al*, Martín F. (2017) An extra virgin olive oil rich diet intervention ameliorates the nonalcoholic steatohepatitis induced by a high-fat "Western-type" diet in mice. *Mol Nutr Food Res*. 61. Doi: 10.1002/mnfr.201600549. IF: 4,323 (11 authors).
- 12.- Escudero-López B, Fernández-Pachón MS, Herrero-Martín G, *et al*, Berná G. (2016) Orange beverage ameliorates high-fat-diet-induced metabolic disorder in mice. *J Funct Foods* 24. Doi: 10.106/j.jff.2016.04.013. IF: 3,973 (7 authors; 6/7).
- 13.- Berná G, Oliveras-López MJ, Jurado-Ruiz E, *et al*, Martín F. (2014) Nutrigenetics and nutrigenomics insights into diabetes etiopathogenesis. *Nutrients*, 6:5338-5369. IF: 3,270. (7 authors).

C.2. Research projects

- 1.- *Title*: Estudio de las propiedades funcionales y bioactivas y de sus efectos sobre la salud de las fracciones biosostenibles de la industrialización del Dyospiros Kaki. *Funding entity*:

MINECO. *Reference:* PID2020-116731RB-C21. *Principal investigator:* Francisco Martín. *Affiliation entity:* UPO. *Grant start and end date:* 01/09/2021-31/08/2024. *Amount of the grant:* 102,500€.

2.- *Title:* Equipment for mouse phenotyping platform. *Funding entity:* MINECO. *Reference:* EQC2018-004897-P. *Principal investigator:* Francisco Martín. *Affiliation entity:* UPO. *Grant start and end dates:* 21/10/2018. *Amount of the grant:* 180,526€.

3.- *Title:* Protection against metabolic diseases in offspring of mothers consuming extra virgin olive oil during pregnancy and lactation. *Funding entity:* MINECO. *Reference:* AGL2017-86927-R. *Principal investigator:* Francisco Martín. *Affiliation entity:* UPO. *Grant start and end date:* 01/01/2018-31/12/2020. *Amount of the grant:* 83,490€.

4.- *Title:* Advanced epigenetic therapy for non-alcoholic fatty liver disease. *Funding entity:* Consejería de Salud, Junta de Andalucía. *Reference:* PC-0148-2016-0149. *Principal investigator:* Francisco Martín. *Affiliation entity:* UPO. *Grant start and end date:* 01/01/2017-31/12/2019. *Amount of the grant:* 103,447€.

5.- *Title:* Mechanisms of protective action against Metabolic Syndrome and type 2 diabetes of hyperlipidic diets based on extra virgin olive oil. *Funding entity:* MINECO. *Reference:* AGL2014-57545-R. *Principal investigator:* Francisco Martín. *Affiliation entity:* UPO. *Grant start and end date:* 01/01/2015-31/12/2016. *Amount of the grant:* 66,550€.

6.- *Title:* Guide to propose health claims in foods: immune function, cognitive function and metabolic syndrome. *Funding:* Ministerio de Ciencia e Innovación, Subprograma INNPRONTA. *Reference:* IPT-20111008. *Principal investigator:* Francisco Martín. *Affiliation entity:* U. Pablo Olavide. *Grant start and end date:* 2011-2014. *Amount of the grant:* 180,062,06€.

7.- *Title:* Development of a new method for monitoring the fulfilling of diets in patients with food intolerance by detecting new serological markers and peptides derived from food. *Funding entity:* Ministerio de Economía y Competitividad, Subprograma INNPACTO. *Reference:* IPT-2011-0952-900000. *Principal investigator:* Francisco Martín. *Affiliation entity:* U. Pablo Olavide. *Grant start and end date:* 01/01/2011-31/12/2013. *Amount of the grant:* 53,873€.

8.- *Title:* Evaluation of bioactive compounds present in a new extra virgin olive oil (oleaster) and its effects on health. *Funding entity:* Corporación Tecnológica Andaluza (CTA). *Reference:* 10/477. *Principal investigator:* Francisco Martín. *Affiliation entity:* U. Pablo Olavide. *Grant start and end date:* 01/01/2011-31/12/2013. *Amount of the grant:* 84,325€.

C.3. Contracts, technological or transfer merits

1.- *Title:* Development of biological markers tests for the diagnostic of Central Sensitization Syndrome. *Company:* Hospital Viamed. *Principal investigator:* Francisco Martín. *Affiliation entity:* U. Pablo Olavide. *Grant start and end date:* 2019-2021. *Amount:* 229,168€.

2.- *Title:* Supervision and monitoring of school canteens from Andalucía public schools. *Company:* Ente Público Andaluz de Infraestructuras y Servicios Educativos. *Principal investigator:* Francisco Martín. *Affiliation entity:* U. Pablo Olavide. *Grant start and end date:* 2010-2011. *Amount:* 27,908€.

3.- *Title:* Development of a platform to generate monoclonal antibodies. *Company:* Fundación Progreso y Salud, Consejería de Sanidad, Junta de Andalucía. *Principal investigator:* Francisco Martín. *Affiliation entity:* U. Pablo Olavide. *Grant start and end date:* 2010-2011. *Amount:* 103,400€.

C.4. Patents

1.- *Title:* KINBIA Body Composition Assessment. *Inventors:* Antonio J Berral, Franz Martín, José Naranjo, Francisco J. Berral. *Publication number:* 2004083599534. *Filing date:* 8th April 2020. *Titular entity:* Universidad Pablo Olavide. *Exploitation company:* none.

2.- *Title:* Obtaining and purifying carotenoids from by-products of persimmon industrialization for its application in foods and beverages, of a functional nature, intended for human consumption. *Inventors:* Sara Gea, María Hernández, Franz Martín, Bernat Soria, Domingo Saura, Nuria Martí, Manolo Valero, David Mula. *Publication Number:* P201700646. *Priority Countries:* Europe. *Filing date:* 27th June 2017. *Titular entity:* Mitra Solutions SL. *Exploitation company:* Mitra Solutions SL

3.- *Title:* Method for obtaining pancreatic beta-cell surrogates by increasing pancreatic and duodenal homeobox 1 (PDX1) expression. *Inventors:* Bernat Soria, Abdelkrim Hmadcha, M^a

Carmen Salguero-Aranda, Francisco Bedoya, Juan R Tejado, Franz Martin, Rafael Tapia. *Publication number:* EP14382334.2. *Priority Countries:* Europe. *Filing date:* 8th September 2014. *Titular entity:* Fundación Progreso y Salud-Universidad Pablo Olavide. *Exploitation company:* none.

4.- *Title:* Methodology to obtain data useful for differential diagnostic of hepatic fibrosis. *Inventors:* Anabel Rojas, David Cano, Irene Delgado, Bernat Soria y Franz Martín. *Publication number:* P201330636/PCT ES2014/070378. *Priority Countries:* Spain, UE, USA, UAE, Arabia Saudi. *Filing date:* 30th April 2014. *Titular entity:* Fundación Progreso y Salud-Universidad Pablo Olavide. *Exploitation company:* Vidia Health SA.

5.- *Title:* Methods for the in vitro proliferation of cells derived from tissues of endodermal origin. *Inventors:* Adrian Khoo, Franz Martín, Bernat Soria. *Publication number:* EP11752901.6. *Priority countries:* Europe. *Filing date:* 11th October 2012. *Titular entity:* Fundación Progreso y Salud-Universidad Pablo Olavide. *Exploitation company:* none.

6.- *Title:* Design of an ELISA kit to detect lacks in celiac diet adherence. *Inventors:* Franz Martín, Bernat Soria, M^a Ángeles Ortega. *Publication number:* P201131979. *Priority countries:* Spain. *Filing date:* 07th December 2011. *Titular entity:* Fundación Progreso y Salud-Universidad Pablo Olavide. *Exploitation company:* Biomedal SL.

C.5. Member of committees and Institutional responsibilities

1.- European Medicines Agency. Expert from Scientific Committee (2018-). 2.- European Society of Cardiology. Elaboration of "Guidelines on Cardiovascular Disease Prevention (2015)". 3.- Alliance for European Diabetes Research (EURADIA). International Diabetes Federation (IDF). Roadmap for diabetes research. 2013-2014.

C.6. Organization of I+D activities

1.- President of the Scientific Committees of the XXIII, XXIV and XXV Congresses of the Spanish Diabetes Society (SED); 2012-2014. 2.- Vicepresident of the Scientific Committee of the Spanish Federation of Societies of Nutrition, Food and Dietetic (FESNAD); 2015.

C.7. Membership of Scientific Societies and Agencies

1.- Member of the Governing Board of the International Diabetes Federation (IDF-Europa), 2012-2015. 2.- Vice-chair of the Spanish Diabetes Society (SED), 2010-2014. 3.- Vice-chair of the Foundation for Diabetes (FED), 2010-2014. 4.- Member and Vice-chair of the Scientific Committee of the Spanish Food Safety and Nutrition Agency (AESAN), 2009-2012. 5.- Collaborator of the 17th Panel ("Nutrition and Health"), Spanish Research Agency (AEI), 2018-to date. 6.- Vice-chair of the Spanish Diabetes Society (SED). 2020-to date.

C.8. Evaluation and editorial Committees

1.- External referee for ANEP, FIS, Junta de Castilla y León, Junta de Andalucía, Gobierno Vasco, Juvenile Diabetes Foundation Research, Consejo Nacional de Ciencia y Tecnología (CONACYT, México) Fundación La Caixa, French National Reserach Agency. 2.- Member of the Editorial Board of the Journals "Islets", "World Journal of Stem Cells" y "World Journal of Translational Medicine". 3.- Guest Editor from the Special Issue entitled: "Novel functional foods: Processing, bioactive compounds characterization and potential health effects" from the Foods Journal. 4.- Guest Editor from the Special Issue entitled "Olive oil and Health" from the Nutrients Journal.

C.9. Others

1.- Head of the Department of Molecular Biology and Biochemistry Engineering (2006-2012; U. Pablo Olavide). 2.- Vice-chancellor of Teaching Staff (2014-2020; U. Pablo Olavide). 3.- Coordinator of the research programme "Molecular and cellular determinants of pancreatic islets function, damage and protection. Regenerative medicine and advanced therapies" from the CIBER of Diabetes and Associated Metabolic Diseases (CIBERDEM).