

Part A. PERSONAL INFORMATION

CV date

10/01/2020

First and Family name	Daniel Bernardo Pérez Cremades		
Social Security, Passport, ID number	21686354E	Age	32
Researcher codes	WoS Researcher ID (*)		
	SCOPUS Author ID(*)	36155702300	
	Open Researcher and Contributor ID (ORCID) **	0000-0002-0969-8762	

(*) At least one of these is mandatory

(**) Mandatory

A.1. Current position

Name of University/Institution	1.Brigham and Women's Hospital / Harvard Medical School 2.University of Valencia		
Department	1.Cardiovascular Medicine 2.Physiology		
Address and Country	429 Shawmut Ave 02118 Boston MA (USA)		
Phone number	699175683	E-mail	daniel.perez@uv.es
Current position	Postdoctoral Fellow	From	2018
Key words	miRNAs, endothelium, angiogenesis, ischemia		

A.2. Education

Degree/PhD	University	Year
PhD in Physiology	University of Valencia	2017
Master's Degree in Physiology	University of Valencia	2012
Degree in Biology	University of Valencia	2011

A.3. JCR articles, h Index, thesis supervised...

JCR articles: Q1 (8), Q2 (4)

Average impact factor: 4.4

h index: 7

Cite number: 175

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

I combined my Biology Degree studies with research activities, collaborating in the Cellular Biology Department (University of Valencia) as a research collaboration fellow (Ministry of Education – 2009/2010) and as an Erasmus fellow in School of Environment and Life Sciences (Salford University, UK). Since 2011, I joined to the “Laboratorio de Investigación en Células Endoteliales – LInCE” led by Carlos Hermenegildo and Susana Novella at the Department of Physiology (University of Valencia). I completed the Master Degree in Physiology (2012), obtaining the qualification of Excellent. Thanks to a predoctoral fellowship from University of Valencia, I conducted my PhD studies focusing on the role of sex hormones in endothelial function. Specifically, the regulation of microRNAs expression profile in endothelial cells exposed to estradiol. In addition, I was Postgraduate Fellow in the Department of Pharmacology at Yale University (Aug-Dec, 2015) under the supervision of William C. Sessa. In September 2017, I got my PhD in Physiology, obtaining the higher qualification Excellent with distinction “Cum Laude” and International Doctor Mention. In 2018, I obtained a postdoctoral fellowship from Generalitat Valenciana to enhance my knowledge on the role of angiogenesis-related miRNAs involved in vascular ageing and menopause. Currently, I am working as a Visiting Researcher Fellow at Brigham and Women's Hospital (BWH) and Harvard Medical School (HMS) under the supervision of Mark W. Feinberg. My research at BWH/HMS focuses on the influence of miRNAs in response to injury in ischemic cardiovascular diseases, particularly those affecting angiogenic function. The project is funded by the Strategically Focused Research Networks (American Heart Association), and I have interacted and collaborated with multiple research centers (Dartmouth-Hitchcock Medical Center, Northwestern University, and University of Florida).



I have participated in 5 research projects. I have co-authored 12 articles in peer-reviewed journals (8 of them as first or co-first author), 4 of them during my Postdoctoral period. Quality indicators of my scientific production are: Q1 (8), Q2 (4); total citations: 175; h index = 7. Additionally, I have presented 73 communications in national and international conferences, and I have received 6 research awards, corresponding to research works and communications. I have also participated as reviewer in 3 research journals. In addition, I have been part of the research network in Cardiovascular Diseases of the Carlos III Institute (2013-2017), and I am also member of the Working Group on Atherosclerosis and Vascular Biology (European Society of Cardiology).

I attended international training programs, seminars and specialized courses. I am fellow in the Real Colegio Complutense (RCC) at Harvard University. I have teaching experience at different universities and I have collaborated with different divulgation activities. I have experience supervising Degree and Master students at the University of Valencia and BWH/HMS, and I have co-directed two Master Degree projects in the Master of Physiology (University of Valencia). I have participated in two educational innovation projects. The sum of my research and teaching task has allowed me to obtain the accreditation of "Profesor Ayudante Doctor", by the National Agency for Quality Assessment and Accreditation (ANECA).

Part C. RELEVANT MERITS

C.1. Publications (including books)

1. I Basak*, H Li*, **D Pérez-Cremades***, W Wu, D Ozdemir, S Haemmig, R Boesch Guimaraes; A Manica, JF Marchini, DP Orgill, MW Feinberg. MiR-4674 regulates angiogenesis by targeting p38K signaling in endothelial cells. *Am J Physiol Cell Physiol* 2020. Ahead of print (accepted Jan 03, 2020). IF=3.55 (Q1)
2. **D Pérez-Cremades***, HS Cheng*, MW Feinberg. Non-coding RNA in Critical Limb Ischemia. *Arterioscler Thromb Vasc Biol* 2020, Ahead of print (accepted Dec 12, 2019). IF=6.62 (D1)
3. S. Novella, **D. Pérez-Cremades**, A. Mompéon and C. Hermenegildo. Mechanisms underlying the influence of estrogen on cardiovascular physiology in women. *J Physiol* 2019; 597: 4873-4886. IF=4.98 (Q1)
4. **D. Pérez-Cremades**, A. Mompeón, X. Vidal-Gómez, C. Hermenegildo and S. Novella. Role of miRNA in the Regulatory Mechanisms of Estrogens in Cardiovascular Ageing. *Oxid Med Cell Longev* 2018; 6082387. IF=4.87 (Q2)
5. J. S. Ibáñez-Cabellos*, C Aguado*, **D. Pérez-Cremades***, J. L. García-Giménez*, C. Bueno-Betí, E.M. García-López, C. Romá-Mateo, S. Novella, C. Hermenegildo and F.V. Pallardó. Extracellular histones activate autophagy and apoptosis via mTOR signaling in human endothelial cells. *Biochim Biophys Acta-Mol Basis Dis* 2018; 1864: 3234-3246. IF=4.30 (Q1)
6. X. Vidal-Gómez*, **D. Pérez-Cremades***, A. Mompeón, A.P. Dantas, S. Novella, C. Hermenegildo. MicroRNA as crucial regulators of gene expression in estradiol-treated human endothelial cells. *Cell Physiol Biochem* 2018; 45: 1878-1892. IF=5.50 (D1)
7. **D. Pérez-Cremades**, A. Mompeón, X. Vidal-Gómez, C. Hermenegildo and S. Novella. microRNA as new regulatory mechanism of estrogen vascular action. *Int J Mol Sci* 2018; 19: 473. IF=4.18 (Q2)
8. **D. Pérez-Cremades**, C. Bueno-Betí, J.L. García-Giménez, J.S. Ibáñez-Cabellos, C. Hermenegildo, F.V. Pallardó and S. Novella. Extracellular histones disarrange vasoactive mediators release through COX-NOS interaction in human endothelial cells. *J Cell Mol Med* 2017; 21: 1584-1592. IF=4.30 (Q1)
9. S Atienzar-Aroca, M Flores-Bellver, G Serrano-Heras, N Martinez-Gil, JM. Barcia, S Aparicio, **D Pérez-Cremades**, JM. Garcia-Verdugo, FJ. Romero, J Sancho-Pelluz. Oxidative stress in retinal pigment epithelium cells increases exosome secretion and promotes angiogenesis in endothelial cells. *J Cell Mol Med* 2016; 20:1457-1466. IF=4.50 (Q1)
10. Mompeón, M. Lázaro-Franco, C. Bueno-Betí, **D. Pérez-Cremades**, X. Vidal-Gómez, E. Monsalve, M. M. Gironacci, C. Hermenegildo, S. Novella. Estradiol, acting through ERα, induces endothelial non-classic renin-angiotensin system increasing angiotensin 1-7 production. *Mol Cell Endocrinol* 2016; 422:1-8. IF=3.75 (Q2)

C.2. Research projects and grants

1. 18SFRN33900144, Non-coding RNA in diabetic critical limb ischemia: discovery, pathobiology, and therapeutic intervention. Strategically Focused Research Network – American Heart Association. PI: Mark W. Feinberg (Brigham and Women’s Hospital). 2018-2022. \$1,042,800.
2. FIS PI19/1714, Sex- and estrogen-dependent regulation of miRNA in Acute Coronary Syndrome and functional impact on human endothelial cells. New biomarkers for primary prevention. Instituto de Salud Carlos III, Fondo de Investigación Sanitaria (FIS). PI: Carlos Hermenegildo Caudevilla. (Instituto de Investigación Sanitaria INCLIVA. Universidad de Valencia). 2020-2022. €159,720.
3. FIS PI16/00229, Perfil plasmático de miRNA en infarto agudo de miocardio: relación con la evolución clínica en pacientes y con la función cardiovascular y posible terapia con micropartículas en ratones Instituto de Salud Carlos III, Fondo de Investigación Sanitaria (FIS). PI: Carlos Hermenegildo Caudevilla. (Instituto de Investigación Sanitaria INCLIVA. Universidad de Valencia). 2017- 2019. €134,915.
4. FIS PI13/00617, Modificación del perfil endotelial de miRNA en respuesta al estradiol y al envejecimiento. Relación con la evolución clínica de la reestenosis coronaria. Instituto de Salud Carlos III, Fondo de Investigación Sanitaria (FIS). PI: Carlos Hermenegildo Caudevilla. (Instituto de Investigación Sanitaria INCLIVA. Universidad de Valencia). 2014-2016. €73,205.
5. RD12/0042/0052, Nodo de la red de investigación cooperativa (RETIC) de Enfermedades Cardiovasculares Instituto de Salud Carlos III, Fondo de Investigación Sanitaria (FIS). PI: Carlos Hermenegildo Caudevilla. (Instituto de Investigación Sanitaria INCLIVA. Universidad de Valencia). 2013-2017.

C.3. Contracts

1. EpiDisease S.L. Development of the kit IVD Scoli-Pro (00094348/SNEO-20161172, CDTI). PI: José Luis García-Giménez. Jan 2018 – Jun 2018.
2. INCLIVA Biomedical Research Institute (Fundación Hospital Clínico de Valencia). Red de Enfermedades Cardiovasculares (RD12/0042/0052). PI: Carlos Hermenegildo Caudevilla. Jan 2017 – Jul 2017.

C.4. Patents

C.5. Memberships of scientific societies and networks

1. Member of the Working Group on Atherosclerosis and Vascular Biology (European Society of Cardiology). 2019- .
2. Fellow in the Real Colegio Complutense (RCC) at Harvard University. 2018- .
3. Member of the research network in Cardiovascular Diseases (Carlos III Institute) 2013-2017.
4. Member of the Sociedad Española de Bioquímica y Biología Molecular. 2013- .

C.6. Research supervision experience

1. Lab supervisor in Four Directions Summer Research Program. “miRNA expression from mice and human subjects with diabetes and peripheral artery disease”. Brigham and Women’s Hospital, Harvard Medical School. Student: Mishayla Mitchell. 2019
2. Co-tutor Master’s Thesis. “Influencia del miR-30b-5p en la síntesis de óxido nítrico en células endoteliales” Master’s Degree in Physiology. University of Valencia. Student: Sara Puig Riber. Qualification: Excellent (9.6). 2018
3. Co-tutor Master’s Thesis. “Influencia del miR-30b en la proliferación inducida por estradiol en células endoteliales humanas” Master’s Degree in Physiology. University of Valencia. Student: José Hernández Moreno. Qualification: Excellent (10). 2017

C.7. Teaching experience

- Teaching task at Department of Physiology (University of Valencia):
Degree in Medicine, Odontology, Physiotherapy, Physical Activity and Sport Sciences.
Master’s Degree in Physiology.
- Teaching task at Department of Biomedical Sciences (European University of Valencia):



Degree in Odontology.

- Educational innovation projects:

1. 4883 - I3CE Program, "Evaluar la efectividad del uso de las TIC como herramientas para el aumento de la motivación y la mejora del proceso enseñanza-aprendizaje de los estudiantes en asignaturas de grado". University of Alicante. 2019/2020

2. UV-SFPIE_DOCE14-223052 – DocenTINC program, "Elaboración de material multimedia para el estudio de la fatiga sináptica. University of Valencia. 2014/2015

- Accreditation of "Profesor Ayudante Doctor", by ANECA, 2018.

C.8. Institutional responsibilities

1. Elected member representing Predoctoral Research Fellows at the Centre Board of the Faculty of Medicine and Odontology, University of Valencia. 2014-2016
2. Elected member of the Department Council at Department of Physiology, University of Valencia. 2014-2016

C.9. Awards

1. Alberto Ferrari Award to the best poster communication. "miRNA-regulated cardiovascular pathways in estradiol-treated human vein endothelial cells". 26th European meeting on hypertension and Cardiovascular Protection. Paris, Jun 2016.
2. Best oral communication. "Testosterone and dihydrotestosterone modulate endothelial nitric oxide production through Akt-eNOS pathway in a receptor dependent manner". I Congreso de Biomedicina Predocs de Valencia. Valencia, Nov 2014.
3. Best article of a young investigator in the HERACLES network. "An affordable method to obtain cultured endothelial cells from peripheral blood". Madrid, May 2013.
4. Best oral communication in Physiology. "Producción de prostanoides en células endoteliales humanas expuestas a hormonas sexuales". 3rd Congress of UV Pharmacy Students – 1st International Edition. Burjassot, Mar 2013.
5. Best oral communication in Physiology. "Endothelial progenitor cells: isolation, culture and phenotypic and functional characterization". 3rd Congress of UV Pharmacy Students – 1st International Edition. Burjassot, Mar 2013.
6. Honor mention. "Alteración de los circuitos inhibidores en la corteza somatosensorial del ratón TS65N, un modelo de syndrome de Down". VI Jaime Blanco Award – Fundación Síndrome de Down de Madrid. Madrid, Nov 2009.

C.10. Others

Research activity in international centers.

1. Cardiovascular Medicine Department (Brigham and Women's Hospital / Harvard Medical School, USA) 2018- .

2. Vascular and Therapeutic Program (Yale University, USA) 2015.

3. School of Environment and Life Sciences (Salford University, UK) 2011.

Communications at national and international meetings. 73 works presented at:

National meetings: Valencia, Madrid, Sevilla, Barcelona, Santiago de Compostela, ...

International meetings: France, England, Italy, Finland, USA, Brazil, Chile.

Reviewer of research articles: PLoS One, Oxid Med Cell Longev, Cell Physiol Biochem.

Divulgtion activities. Organizer of the Divulgtion workshop of "Fisiología vascular" at Congreso de Investigación Biomédica. Valencia, Feb 2015 and Feb 2016.

Specialized courses and training programs (most relevants).

1. Research Leaders Academy (American Heart Association). Baltimore (USA). Sep 2019.

2. Introduction to R and Differential Gene Expression workshop. Harvard-Chan Bioinformatics Core workshops, Harvard University. Boston (USA). Dec 2018 and Apr 2019.

3. First Spanish Meeting on Oligonucleotide Therapeutics. Burjassot, Jun 2018.

4. FEBS/IUBMB Advanced Lecture Course: Molecular basis of human diseases: 50 years anniversary of Spetses summer schools. Greece, May 2016.

5. Basic Flow Cytometry Course – International summer school on cytometry (European Society for Clinical Cell Analysis. Valencia, Jul 2013

6. Training for directing and designing procedures with laboratory animals. University of Valencia. Valencia, Jan-Feb 2014.