

Date of the CVA	04/03/2019
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Section A. PERSONAL DATA

Name and Surname	MANUEL PICON RUIZ		
DNI		Age	39
Researcher's identification number	Researcher ID		
	Scopus Author ID		
	ORCID	0000-0002-9427-0946	

A.1. Current professional situation

Institution	University of Miami		
Dpt. / Centre			
Address	300 Euclid Ave, Apt 205, 33139, Miami Beach		
Phone		Email	mpicon@ugr.es
Professional category	Assistant Scientist	Start date	2018
UNESCO spec. code	240000 - Life Science		
Keywords	Biomedicine; Molecular, cellular and genetic biology		

A.2. Academic education (Degrees, institutions, dates)

Bachelor/Master/PhD	University	Year
Biomedicine	University of Granada	2012
Regenerative Biomedicine	University of Granada	2008
Biology	University of Málaga	2006

A.3. General quality indicators of scientific production

H-index: 10.

i10 index: 11.

Citations: 450.

Articles: 13 (11 in Q1 journals; 1 as cover page in the top impact factor journal in oncology; 4 as first, last or corresponding author).

Book Chapters: 3.

Patents: 1 (as collaborator).

Participation in National and International Research Centers: 5.

Participation in National and International Projects: 12 (1 as PI).

Participation in National and International Conferences: 30 (3 first prizes).

Participation as Reviewer: 4 (all Q1 journals).

Fellowships and Scholarships obtained: 8.

Section B. SUMMARY OF THE CURRICULUM

Manuel Picón Ruiz started his research career studying a Master degree in Regenerative Biomedicine at the University of Granada in Spain. In 2008 successfully completed his Master studies, with a rate of 3 out of 4. During his PhD studies, Manuel carried out two different short-term predoctoral research stays: one for 3 months at Bath University of the United Kingdom, under the supervision of Dr. David Tosh, granted by the European Marie Curie short-term-fellowship; and the other one at the University of Miami, where he worked in the laboratory of Dr. Joyce Slingerland for 6 months, funded in part by a grant from the Andalusian Government, and partially by the University of Miami. In November 2012 Manuel obtained his Ph.D. in Biomedicine with the qualification Cum Laude and the International mention by the University of Granada in Spain.

In 2013, Manuel Picón Ruiz initiated his postdoctoral studies at the University of Miami, USA; first as Postdoctoral Associate Researcher and actually as Assistant Scientist. He also belongs to the interdisciplinary group "Advanced Therapies: Differentiation, Regeneration and Cancer", composed by members of the University of Granada, the University of Jaén and the University

Hospital of Granada (Spain). It is remarkable that Manuel Picón Ruiz is awarded with a highly competitive Postdoctoral Fellowship as a Principal Investigator from the Susan G. Komen Foundation in his actual lab; and has recently obtained a Marie Skłodowska-Curie Actions Individual Fellowship to be carried out at the University of Granada.

Manuel Picón Ruiz has conducted his research career in a total of 5 international research centers, including the Cardiology Service of the University Hospital Virgen de la Victoria (University of Málaga, Spain), the Andalusian Stem Cell Bank (Granada, Spain), the Institute of Biopathology and Regenerative Medicine (IBIMER, University of Granada, Spain), the Department of Biology and Biochemistry (University of Bath, UK) and the Sylvester Comprehensive Cancer Center (University of Miami, USA). During his career, Manuel has obtained 8 competitive fellowships and has participated in more than 10 research projects, one as Principal Investigator. He has authored 13 papers in scientific journals, 11 of them included in first quartile journals; and 4 as first, last or corresponding author. Among of them, he is first author of a Review article in the top ranked journal in oncology (CA: A Cancer Journal for Clinicians, IF=244.585) that served as cover page and has been classified as a "Continuing Medical Education" and "Continuing Nursing Education" by the American Cancer Society and the Accreditation Council for Continuing Medical Education. He has an H-index of 10 and an i10-index of 11, with over 450 citations. Moreover, has published 3 book chapters in prestigious publishers; has participated in a considerable number of congress/symposium with more than 30 communications and 3 first prizes; and has also participated in the development of an international patent. Furthermore, he has served as reviewer for four different journals.

Regarding to his teaching activity, Manuel has been novice professor at the University of Granada; and actually participates in teaching undergraduate and PhD students at the University of Miami and as invited professor for Master and PhD programs at the University of Granada. In addition, Manuel is accredited as Professor for Public and Private Universities by the ANECA.

Section C. MOST RELEVANT MERITS (ordered by typology)

C.1. Publications

- 1 Scientific paper. Picon-Ruiz M; et al. 2019. Estrone cooperates with the NF- κ B pathway in obesity-mediated inflammation and ER+ breast cancer progression Nature Medicine. Submitted.
- 2 Scientific paper. Kim M; et al. 2017. VEGFA links self-renewal and metastasis by inducing Sox2 to repress miR-452, driving Slug Oncogene. 36-36, pp.5199-5211.
- 3 Scientific paper. Morata-Tarifa C; et al. 2017. Validation of suitable normalizers for miR expression patterns analysis covering tumour heterogeneity Scientific Reports. 7, pp.39782.
- 4 Scientific paper. Picon-Ruiz M; et al. 2016. Interactions between adipocytes and breast cancer cells stimulate cytokine production and drive Src/Sox2/miR-302b mediated malignant progression Cancer Research. 76-2, pp.491-504.
- 5 Scientific paper. Morata-Tarifa C; et al. 2016. Low adherent cancer cell subpopulations are enriched in tumorigenic and metastatic epithelial-to-mesenchymal transition-induced cancer stem-like cells Scientific Reports. 6, pp.18772.
- 6 Scientific paper. Thakkar A; et al. 2016. Vitamin D and androgen receptor-targeted therapy for triple-negative breast cancer Breast Cancer Research and Treatment. 157-1, pp.77-90.
- 7 Scientific paper. Zhao D; et al. 2015. VEGF drives cancer-initiating stem cells through VEGFR-2/Stat3 signaling to upregulate Myc and Sox2 Oncogene. 34-24, pp.3107-3119.
- 8 Scientific paper. López-Ruiz E; et al. 2014. Cardiomyogenic differentiation potential of human endothelial progenitor cells isolated from patients with myocardial infarction Cytotherapy. 16-9, pp.1229-1237.
- 9 Scientific paper. Ramírez A; et al. 2014. HER2-signaling pathway, JNK and ERKs kinases, and cancer stem-like cells are targets of Bozepinib small compound Oncotarget. 5-11, pp.3590-3606.
- 10 Scientific paper. López-Ruiz E; et al. 2013. Chondrocytes extract from patients with osteoarthritis induces chondrogenesis in infrapatellar fat pad-derived stem cells Osteoarthritis and Cartilage. 21-1, pp.246-258.

- 11 Scientific paper. Azzam DJ; et al. 2013. Triple negative breast cancer initiating cell subsets differ in functional and molecular characteristics and in γ -secretase inhibitor drug responses *EMBO Molecular Medicine*. 5–10, pp.1502–1522.
- 12 Scientific paper. Marchal JA; et al. (/1). 2012. Purification and long-term expansion of multipotent endothelial-like cells with potential cardiovascular regeneration *Stem Cells and Development*. 21–4, pp.562–574.
- 13 Scientific paper. Rodríguez-Serrano F; et al. 2010. Promotion of human adipose-derived stem cell proliferation mediated by 3 exogenous nucleosides *Cell Biology International*. 34–9, pp.917–924.
- 14 Book chapter. Picón-Ruiz M; et al. 2014. Generation of autologous Multipotent Endothelial-Like Cells from lipoaspirates of human Adipose-Derived Stem Cells and polymer microarrays technology: Potential Cardiovascular Regeneration *Stem Cells and Cancer Stem Cells: Therapeutic Applications in Disease and Injury*. Springer. Hayat, MA (Ed). 12. ISBN 978–94–017–8032–2.
- 15 Book chapter. García MA; et al. 2012. Apoptosis as a Therapeutic Target in Cancer and Cancer Stem Cells: Novel Strategies and Futures Perspectives *Apoptosis and medicine*. Intech. Tobias M. Ntuli (Ed). ISBN 978–953–51–0701–9.
- 16 Book chapter. Perán M; et al. 2009. Fluorescence Recovery After Phothobleaching Cell Movement: New Research Trends. Nova Science Publishers, Inc. ISBN 978–1–60692–570–6.
- 17 Review. Picon-Ruiz M; et al. 2017. Obesity and Adverse Breast Cancer Risk and Outcome: Mechanistic Insights and Strategies for Intervention *CA: A Cancer Journal for Clinicians*. 67–5, pp.378–397.
- 18 Conference Publication. Picon-Ruiz M; et al. 2018. Circulating CAF/CTC complexes and breast cancer metastasis *Cancer Research*. 78–4 Supplement, pp.Abstractnr P2–01–10–Abstract nr P2–01–10.
- 19 Conference Publication. Morata-Tarifa C; et al. 2018. Dual Role of TLR4 in Colorectal Tumorigenesis in Obesity-mediated Inflammation *In Vivo Gastroenterology*. 154–6 Supplement, pp.S–649–S–649.
- 20 Conference Publication. Picon-Ruiz M; et al. 2018. Interactions between adipocytes and breast cancer cells stimulate cytokine production and drive Src/SOX2/miR–302b mediated malignant progression *Cancer Research*. 78–4 Supplement, pp.Abstract nr P6–05–01–Abstract nr P6–05–01.
- 21 Conference Publication. Picon-Ruiz M; et al. 2018. Mammary adipocytes mediate cytokine production and malignant progression of ER–positive breast cancer through NF–kB activation *Cancer Research*. 78–13 Supplement, pp.Abstract nr 4501–Abstract nr 4501.
- 22 Conference Publication. A Thakkar; et al. 2017. Targeting androgen receptor and vitamin D receptor in triple negative breast cancers *Clinical Cancer Research*. 23–1 Supplement, pp.B20–B20.
- 23 Conference Publication. J Slingerland; et al. 2016. Estrogens contribute to cytokine upregulation and cancer stem cell recruitment upon breast cancer contact with mature human mammary adipocytes: Effects of estrogen type and adipocyte donor weight *Cancer Research*. 76–4 Supplement, pp.P1–03–02–P1–03–02.
- 24 Conference Publication. A Rama; et al. 2010. Transfection of the gene E and later application of cytotoxic drugs in the treatment of colon cells cancer *Annals of Oncology*. 21, pp.37–37.

C.2. Participation in R&D and Innovation projects

- 1 Mechanistic links between inflammation and the increased risk and metastasis of breast cancer in obese women (1R01CA210440–01A1) NIH–NCI. Joyce Slingerland. (University of Miami (Sylvester Comprehensive Cancer Center)). 01/04/2017–31/03/2022. 1.250.000 €.
- 2 Estrogens, Inflammation and the Aggressive Behavior of Breast Cancer in Obesity (PDF16380958) Susan G. Komen Foundation. Manuel Picon Ruiz. (University of Miami (Sylvester Comprehensive Cancer Center)). 01/07/2016–30/06/2019. 180.000 €.
- 3 Intelligent olive oil nanocapsules to the oral administration of drugs against pancreatic stem cells (MAT2015–63644–C2–2–R) MINECO. Juan Antonio Marchal Corrales. (University of Granada (IBIMER)). 04/01/2016–31/12/2018. 90.000 €.

- 4 Effects of Obesity on Self-Renewal and Targeted Therapy of Human Breast Cancer Stem Cells (M1600113) Breast Cancer Research Foundation. Joyce Marie Slingerland. (University of Miami (Sylvester Comprehensive Cancer Center)). 13/03/2013–30/09/2018. 3.000.000 €.
- 5 Role of TLR4 in colitis-associated neoplasia (2R01CA137869–06–A1) Maria Abreu. (University of Miami (Sylvester Comprehensive Cancer Center)). 01/12/2008–30/06/2018. 2.175.000 €.
- 6 Mechanistic links between inflammation and the increased risk and metastasis of breast cancer in obese women (M1601659) Breast Cancer Research Foundation. Joyce Slingerland. (University of Miami (Sylvester Comprehensive Cancer Center)). 01/07/2016–31/07/2017.
- 7 Role of cancer stem cells from breast, colon and melanoma in response to anticancer therapy: characterization and selective activity of new heterocyclic bases (PI10/02295) Health Institute Carlos III. Juan Antonio Marchal Corrales. (University of Granada (IBIMER)). 01/10/2011–30/09/2014. 119.185 €.
- 8 Characterization and role of cancer stem cells from colorectal tumors to respond to antitumoral therapies (GREIB.PT_2010_09) GREIB Translational Projects. Juan Antonio Marchal Corrales. (University of Granada (IBIMER)). 07/04/2011–31/12/2011. 10.000 €.
- 9 Development of an algorithm-based bioinformatic model: predictive tool of behaviour and traceability of stem cells for myocardial differentiation FIBAO. Antonia Aránega Jiménez. (FIBAO). 01/10/2008–30/09/2009. 60.000 €.
- 10 Differentiation induction of stem cells as myocardial regenerative therapy (TCRM0014, 2006) Health Counseling–Progress and Health Foundation. Antonia Aránega Jiménez. (University of Granada). 01/11/2007–25/11/2008. 80.000 €.
- 11 Etiological Analysis and prognostic value of endothelial progenitor cells and circulating inflammatory cytokines in patients with chronic heart failure (SEC 2007) Spanish Cardiology Society. Eduardo de Teresa Galvan. (University Hospital Virgen de la Victoria). 01/11/2007–25/11/2008. 71.400 €.
- 12 Study of the homing of circulating progenitor cells into ischemic cardiac tissue (CM 0018/2005) Health Counseling–Progress and Health Foundation. Eduardo de Teresa Galván. (University Hospital Virgen de la Victoria). 01/11/2007–25/11/2008. 133.210 €.

C.3. Participation in R&D and Innovation contracts

C.4. Patents

Gema Jiménez González; Cynthia Morata Tarifa; María Ángeles García Chaves; Macarena Perán Quesada; Juan Antonio Marchal Corrales; Manuel Picon Ruiz; Elena López Ruiz; Alberto Ramírez Rivera; Esther Carrasco Pardo. P201430997. Culture Media and Methodology for Enrichment and Maintenance of Cancer Stem Cells Spain. 2014. University of Granada.