MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES

CURRICULUM VITAE (maximum 4 pages)

CV date	25/9/2018

Part A. PERSONAL INFORMATION

First and Family name	JOSÉ ROMÁN PÉREZ CASTIÑEIRA		
ID number	29476575M	Age	54
Researcher numbers	Researcher ID	F-2811-2010	
	Orcid code	0000-0002-4749-6897	

A.1. Current position

Name of University/Institution	UNIVERSITY OF SEVILLA		
Department	PLANT BIOCHEMISTRY AND MOLECULAR BIOLOGY		
Address and Country	AVENIDA AMÉRICO VESPUCIO, 49. 41092 SEVILLA, SPAIN		
Phone number	+34954489524	E-mail	jroman@us.es
Current position	ASSOCIATE PROFESSOR ("PROFESOR TITULAR")	From	29/2/2008
Espec. cód. UNESCO	230227		
Keywords	BIOENERGETICS, MOLECULAR BIOLOGY, BIOMEMBRANES, BIOCHEMISTRY, HETEROLOGOUS EXPRESSION, YEAST, ION PUMPS, PYROPHOSPHATE		

A.2. Education

PhD	University	Year
BIOCHEMISTRY	UNIVERSITY OF EDINBURGH (UK)	1991
Graduate		
"LICENCIADO" (5 years' degree) in CHEMISTRY	UNIVERSITY OF SEVILLA (SPAIN)	1986

A.3. JCR articles, h Index, theses supervised…

Total citations: 474 (423 excluding self-citations) (Web of Science)
Average citations/year in the last five years (excluding 2018): 35,4 (WOS)
Total publications in 1st quartile (Q1): 9
H index: 13 (Web of Science**)**
4 Ph. D. theses supervised

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

José R. Pérez Castiñeira obtained his "Licenciado" (5 years') degree in Chemistry at the University of Sevilla (Spain) in 1986 and his Ph. D. at the Departament of Biochemistry of the University of Edinburgh in 1991, the latter under the supervision of Dr. David K. Apps. The Ph. D. Thesis was entitled: "Structure and function of the bovine chromaffin granule proton pump". After successfully passing the "viva", the applicant stayed one more year at Edinburgh (until December 1992). During his whole stay in Edinburgh he was financially supported by a Ph. D. studentship from the Spanish Ministry of Education (1988-1992). After one year at Professor José María Vega's laboratory at the University of Sevilla, working on the sulphur metabolism in microalgae (4 papers in international journals), the applicant joined Professor Ramón Serrano´s lab at the Polytechnic University of Valencia. This stay (from January 1993 to May 1996) was financially supported by a contract from the Spanish Ministry of Education ("Reincorporation Programme"). The work at Valencia involved the participation in a European Project on the Molecular Biology of P-type ATPases in higher plants. Two publications in *Plant Molecular Biology* y *Plant Cell* originated from this work. In May 1996, the applicant joined Professor Losada Villasante's group (led by Dr. Aurelio Serrano after Prof. Losada's retirement) at the "Instituto de Bioquímica Vegetal y Fotosíntesis", a joint research centre of the University of Sevilla and the Spanish Research Council (CSIC). Since then, the major research line has been the study of proteins that hydrolyse inorganic pyrophosphate (PPi) at molecular, biochemical, structural and physiological levels, with special interest on PPi-dependent ion (H^+ and/or Na^+) pumps. This research line has produced 16 publications in international journals. As far as academic positions are concerned, since 1996 JRPC has been (a) CSIC post-doctoral fellow (1997-2000), (b)

Assistant Professor (2000-2008) and (c) Associate Professor (since 2008) at the University of Seville. The last position was obtained after successfully passing a national selection procedure for university professors ("Habilitación", held at the University of Salamanca in 2007)

Part C. RELEVANT MERITS

C.1. Selected publications (including books)

- **Perez-Castineira JR**, Lopez-Marques RL, Villalba JM, Losada M, Serrano A. Functional complementation of yeast cytosolic pyrophosphatase by bacterial and plant H+-translocating pyrophosphatases. *Proc Natl Acad Sci U S A.* **99(25)**,15914-9 **(2002)**
- Drake R., Serrano, A., **Pérez-Castiñeira J.R.**. N-terminal chimeras with signal sequences enhance the functional expression and alter the subcellular localization of heterologous membrane-bound inorganic pyrophosphatases in yeast. *Biochem. J.* **426,** 147-157 **(2010)**
- **Pérez-Castiñeira JR**, Hernández A, Drake R, Serrano A. A plant proton-pumping inorganic pyrophosphatase functionally complements the vacuolar ATPase transport activity and confers bafilomycin resistance in yeast. *Biochem J.* **437(2)**, 269-78 **(2011)**
- Hernandez A, Serrano-Bueno G, **Perez-Castineira JR**, Serrano A. Intracellular proton pumps as targets in chemotherapy: V-ATPases and cancer. *Curr Pharm Des.* **18(10)**, 1383-94 **(2012)**
- Serrano-Bueno G, Hernández A, López-Lluch G, **Pérez-Castiñeira JR**, Navas P, Serrano A. Inorganic pyrophosphatase defects lead to cell cycle arrest and autophagic cell death through NAD+ depletion in fermenting yeast *J Biol Chem.* **288(18)**, 13082-92 **(2013)**
- Hernández A, Serrano-Bueno G, **Perez-Castiñeira JR**, Serrano A. 8-Dehydrosterols induce membrane traffic and autophagy defects through V-ATPase dysfunction in *Saccharomyces cerevisae*. *Biochim Biophys Acta.* **1853 (11 Pt A),** 2945-2956 **(2015)**. doi: 10.1016/j.bbamcr.2015.09.001
- Hernández-López, A.; Herrera-Palau, R.; Madroñal-de Sancha, J. M.; Albi-Rodriguez, T.; Lopez-Lluch, G.; **Pérez-Castiñeira, J. R.**; Navas-Lloret, P.; Valverde-Albacete, F.; Serrano-Delgado, A. Vacuolar H+-pyrophosphatase AVP1 is involved in amine fungicide tolerance in *Arabidopsis thaliana* and provides tridemorph resistance in yeast. *Frontiers in Plant Science* 7: 1-13 (**2016)**

C.2. Research projects and grants

PROJECT: Bioenergetics and metabolism of inorganic pyrophosphate and polyphosphates in microalgae and plants: Molecular and functional analysis of the implicated proteins
FUNDING INSTITUTION: Spanish Ministry of Education. National I+D Programme
GROUP LEADER: Dr. Aurelio Serrano, Instituto de Bioquímica Vegetal y Fotosíntesis (Universidad de Sevilla-CSIC)
DATE: 2004 – 2007

PROJECT: Functional genomics of the tolerance to abiotic stress in rice: a basic approach to its potential application to production improvement
FUNDING INSTITUTION: Regional Government of Andalucia (Code: P06-CVI-01450)
GROUP LEADER: Dr. José María Romero Rodríguez, Instituto de Bioquímica Vegetal y Fotosíntesis (Universidad de Sevilla-CSIC)
DATE: May 2007

PROJECT: Proteins of bioenergetics and metabolism of inorganic pyrophosphate and polyphosphates: functional implications of their subcellular localization in eukaryotes
FUNDING INSTITUTION: Spanish National I+D Programme (Code: BFU2007-61887)
GROUP LEADER: Dr. Aurelio Serrano, Instituto de Bioquímica Vegetal y Fotosíntesis (Universidad de Sevilla-CSIC)
DATE: 1/10/2007-30/9/2010

PROJECT: Modification by means of plant enzymes of the inorganic pyrophosphate metabolism of yeast and animal cell lines. Biotechnological and biomedical implications

FUNDING INSTITUTION: Regional Government of Andalucia (Code: P07-CVI-03082)
GROUP LEADER: Dr. Aurelio Serrano, Instituto de Bioquímica Vegetal y Fotosíntesis (Universidad de Sevilla-CSIC)
DATE: 2008-2012

PROJECT: New functional aspects of pyrophosphate bioenergetics: ion homeostasis and metabolic optimisation
FUNDING INSTITUTION: Spanish National I+D Programme (Code: BFU2010-15622/BMC)
GROUP LEADER: Dr. Aurelio Serrano, Instituto de Bioquímica Vegetal y Fotosíntesis (Universidad de Sevilla-CSIC)
DATE: 2011-2013

C.3. Contracts

PROJECT: Identification of microorganisms by molecular biological tools
FUNDING INSTITUTION: Andalusian Institute of Historic Heritage (IAPH)
DATE: 2008-2010

PROJECT: Study of the photosynthetic organisms involved in the biodeterioration of "Bic" building, the former "Hospital de las Cinco Llagas", current seat of the Andalusian Parliament (**CODE: 3333/0217**)
FUNDING INSTITUTION: Andalusian Parliament
DATE: 6/2018-5/2019

C.4. Patents

Inventors: Aurelio Serrano Delgado, Agustín Hernández López, José R. Pérez Castiñeira
Título: Use of nucleotidic sequences encoding proton-translocating pyrophosphatases to produce yeasts, fungi and animal cells resistant to cytotoxic drugs and fungicides and the method to produce
N.º of application: P201130852 Date: 3/9/2014
Insitutions: University of Sevilla and Spanish Research Council (CSIC)

C.5. Memberships of scientific societies

Full member of the Biochemical Society

C.6. Supervised Ph. D. theses: 4 (1 of them "Extraordinary Doctorate Prize of the University of Seville, 2014)

C.7. Supervised Master theses: 2

C.8. Supervised final year's projects: 8