DATE	21/05/2019

Part A. Personal Information

Surname(s)	Muñiz	
Forename	Manuel	
Social Security, Passport, ID number	28899265H	
Sex	Male	
Age	51	
Researcher codes	WoS Researcher ID *(*)*	
	SCOPUS Author ID *(*)*	14018271400
	Open Researcher and Contributor ID (ORCID)	0000-0001-8011-6991

(*) At least one of these is mandatory

A.1. Current position

Post/ Professional Category	Associate Professor	
UNESCO Code	Cell Biology 2407	
Key Words	Membrane trafficking	
Name of the University/Institution	University of Seville	
	Department/Centre	Cell Biology/Biology
	Full Address	Avda. Reina Mercedes 6
	Email Address	mmuniz@us.es
	Phone Number	+3449545569
Start date	2004	

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

Year	*University*	*Degree*	*Title*
1991	*SEVILLE*	*First degree*	*BA in Biology*
		Masters (if appropriate)	
1996	*SEVILLE*	*PhD*	*Molecular and Cellular Biology*

A.3. Indicators of Quality in Scientific Production *(See the instructions)*

Total number of citations: 992
Average number of citations during the last five years: 55,6
Total number of publications in Q1: 21
Total number of publications in D1: 7
h-index: 15
Thesis supervised: 3 finished, 2 under training

Research articles as first or corresponding author in *Cell, Curr Biol., J Cell Biol, PNAS, EMBO J, J Cell Sci., Mol Biol Cell., J Lipid Res., J Biol Chem, etc.*

Part B. Free Summary of CV *(Max. of 3.500 characters, including spaces)*

At present, I am Associate Professor and Principal Investigator of the “Membrane Trafficking Group" at the Cell Biology Department of the University of Seville and Associate Researcher of IBiS (Institute of Biomedicine of Seville), a research center of excellence. I studied Biology at the University of Seville and finished in 1991 with summa cum laude. I developed a strong interest in membrane trafficking during my period as a PhD student in the lab of Angel Velasco at the Department of Cell Biology of the University of Seville, which I finished in 1996 with summa cum laude and received the Best PhD Thesis Award. By using mammalian

cells as model system, I found that the secretory pathway, traditionally considered as a constitutive pathway, is surprisingly highly regulated by signalling molecules like kinases. I showed how vesicle budding events at the endoplasmic reticulum (ER) and Golgi apparatus are controlled by the activity of the protein kinase A. My PhD work was published in journals like PNAS, J Biol Chem or J Cell Sci. Immediately following my PhD, I focused on the molecular mechanisms that underlie intracellular transport and seek to understand how proteins catalyze distinct sub-reactions in the early secretory pathway. To investigate the basis of vesicular trafficking, I worked on the mechanisms of ER protein export in the lab of Howard Riezman at the Biozentrum in Basel as a Post-Doc with FEBS and Human Frontier fellowships. Howard's lab was by that time starting to unravel how a clinically relevant class of glycolipid-linked proteins (GPI-proteins) are exported from the ER using yeast as a powerful model system. My postdoctoral study of GPI-protein exit from the ER led to several novel concepts in membrane trafficking. First, I established the concept of ER cargo receptors by directly probing that specific transmembrane proteins selectively capture GPI-proteins in the ER lumen and link them to the cystosolic vesicle coat for their efficient incorporation into ER-derived vesicles. Next, I revealed that the Golgi is not the first sorting station as it was believed for many years, since I demonstrated that in yeast GPI-proteins are segregated earlier from other secretory proteins at the level of the ER and then packaged into distinct ER-derived vesicles. This finding established the key pioneering concept of different ER export pathways, confirmed later for other cargoes such as collagen. My postdoctoral work was published in prominent prestigious journals such as Cell, J Cell Biol or EMBO J. I moved to the Department of Cell Biology at the University of Seville by 2001 to start working as an independent group leader. I received the Award of Young Researcher of Sevillian Academy of Science in 2002. During this time, I contributed to establish the notion that the protein cargo itself, instead to be a passive vesicle passenger, plays an active role in vesicle formation at the early secretory pathway. Furthermore, I discovered a novel quality control system that explains how the ER export can be adapted to different needs for luminal cargo secretion, which occurs in many specialized secretory cells. These findings were published in top journals like Curr Biol or J Cell Biol among others. My mid- long-term research interests lie in understanding the molecular mechanisms of protein sorting events at the ER/Golgi interface and how they coordinate to dynamically maintain vital organelle homeostasis.

Part C. Relevant accomplishments

C.1. Publications

1- K Funato, H Riezman, **M Muñiz***, 2019, Vesicular and non-vesicular lipid export from the ER to the secretory pathway, Biochimica et Biophysica Acta (BBA)-Molecular and Cell Biology of Lipids, In Press.
*Corresponding Author.

2- N Sikorska, L Lemus, A Aguilera-Romero, J Manzano-Lopez, H Riezman, **M Muñiz**, V Goder, 2016, Limited ER quality control for GPI-anchored proteins, The Journal of Cell Biology, 213, 693-7049

3- M Muñiz*, H Riezman, 2016, Trafficking of glycosylphosphatidylinositol anchored proteins from the endoplasmic reticulum to the cell surface, Journal of Lipid Research 57, 352-360
*Corresponding Author.

4- N García-Rodríguez, J Manzano-López, M Muñoz-Bravo, N García-Rodríguez, J Manzano-López, M Muñoz-Bravo, E Fernández-García, **M Muñiz**, RE Wellinger, 2016, Manganese redistribution by calcium-stimulated vesicle trafficking bypasses the need for P-type ATPase function, Journal of Biological Chemistry, 290, 9335-9347

5- J Manzano-Lopez, AM Perez-Linero, A Aguilera-Romero, ME Martin, T Okano, D Varon Silva, PH Seeberger, H Riezman, K Funato, V Goder, RE Wellinger, **M Muñiz***, 2015, COPII

coat composition is actively regulated by luminal cargo maturation, Current Biology, 25, 152-162
*Corresponding Author.
Dispatch in Current Biology (Fromme JC. 2015. Curr Biol., 25: 67-68), "Article of the month" SEBBM Award (February, 2015)

6- AM Perez-Linero, **M Muñiz***, 2015, Membrane trafficking: Returning to the fold (ER), Current Biology 25, R288-R290.

7- M Muniz*, C Zurzolo, 2014, Sorting of GPI-anchored proteins from yeast to mammals–common pathways at different sites?, J Cell Sci, 127, 2793-2801
*Corresponding Author

8- K Kajiwara, A Ikeda, A Aguilera-Romero, GA Castillon, S Kagiwada, K Hanada, H Riezman, **M Muñiz**, K Funato, 2014, Osh proteins regulate COPII-mediated vesicular transport of ceramide from the endoplasmic reticulum in budding yeast, J Cell Sci, 127, 376-387

9- A Aguilera-Romero, J Kaminska, A Spang, H Riezman, **M Muñiz***, 2008, The yeast p24 complex is required for the formation of COPI retrograde transport vesicles from the Golgi apparatus. The Journal of Cell Biology, 180, 713-720
*Corresponding Author

10- **M Muñiz***, P Morsomme, H Riezman, 2001, Protein sorting upon exit from the endoplasmic reticulum, Cell, 104, 313-320
*First Author
Editorial Commentary in Science.

C.2. Research Projects and Grants

1. **BFU2017-89700-P**, Selección molecular y organización de la ruta secretora temprana, Ministerio de Economía, Industria y Competitividad, Plan Nacional, **Principal Investigator: Manuel Muñiz**, University of Seville, 01/01/2018- 31/12/2019. 121.000 euros

2. **BFU2014-59309-P**. Regulación de la Organización Funcional de la Ruta Secretora Temprana: Papel Activo de las Proteínas Cargo y los Receptores de Transporte, Ministerio de Economía, Industria y Competitividad, Plan Nacional, **Principal Investigator: Manuel Muñiz**, University of Seville, 01/01/2015- 31/12/2017. 169.400 euros

3. **P09-CVI-4503**. Mecanismos Moleculares del Control de Calidad de las Proteínas Ancladas a GPI en el Retículo Endoplásmico. Implicaciones en el Control Inmune en Cáncer y Enfermedades Infecciosas. Consejería de Innovación, Junta de Andalucía. **Principal Investigator: Manuel Muñiz**, University of Seville, 03/03/2011- 03/03/2015, 50.000 euros

4. **UNSE15-CE-3185**. Servicio de preparación de muestras biológicas, documentación y análisis de imagen en la Facultad de Biología. Principal Investigator Francisco Ramos, Fondos FEDER y Ministerio de Economía, Industria y Competitividad. Infraestructura, 01/01/2016-01/03/2017. 299.721,76 euros, Researcher

C.3. Contracts

C.4. Patents and other IPR

C.5, C.6, C.7… Other

C.5. Scientific Awards:
- 3 Sexenios.
- Young Researcher Award, Academy of Science of Seville (2002),
- Best PhD Thesis Award, University of Seville (1996)

C.6. Fellowships:
JSPS (Japan Society for the Promotion of Science) Fellowship to visit Riken Center for Advanced Photonics, 2017.
EMBO short term fellowship to visit the University of Tubingen, 2006.
FEBS and Human Frontier Science Program "long-term" Postdoctoral Fellowship,1996-1999, Graduate fellowship, University of Seville, 1992-1996.

C.7. International Conferences:
Selected Speaker, Special FEBS meeting: The 2018 Golgi meeting: Membrane trafficking in cell organization and homeostasis. 15-19 October 2018, Sorrento, Italy.
Selected Speaker, EMBO Conference Series-The Physiology of the Endoplasmic Reticulum (ER): Function and Dysfunction. 15-20 October 2012, Girona Spain.
Invited Speaker, Gordon Research Conference on Glycolipid and Sphingolipid Biology, Jan 12-17, 2014, Ventura, CA.

C.8. Journal Referee: EMBO J, J Cell Biol., Curr Biol., EMBO Rep., Sci Rep., J Cell Sci., Mol Biol. Cell, J Mol Biol, J Lipid Res. y Biochim Biophys Acta, etc.

C.9. International and National Grant Referee:
- Deutsche Forschungsgemeinschaft (DFG) (German Science Agency).
- USA-Israel Binational Science Foundation (BSF).
- Spanish Science Agency ANEP (Molecular and Cellular Biology and Biotechnology Areas).

C.10. Scientific Selection Committee member: CSIC, Years 2011 and 2016.

C.11. Professional Societies member:
SEBBM (Spanish society of Biochemistry and Molecular Biology society).
SEBC (Spanish society of Cell Biology)

Instructions

Important Announcement

Following the Call for Proposals, **ONLY CVS SUBMITTED IN THIS FORMAT WILL BE TAKEN INTO CONSIDERATION**. **CVs presented in other formats WILL BE DISMISSED with no possibilities for modifications.**

GENERAL CONSIDERATIONS

Following the call it is mandatory to use the following format when filling the document: Font Times New Roman / Arial (minimum size 11), single interlineal space, lateral margins of 2.5 cm and top and bottom margins of 1.5 cm.

Max. length of the whole document (Part A, B and C) cannot exceed four pages.

PART A. PERSONAL INFORMATION

Researcher ID is a unique identifier that consists of alphanumeric characters that enable researchers to manage their publication lists, track their times cited counts and h-index, identify potential collaborators and avoid author misidentification. It is hosted by Web of Science.
Access: Web of Science > My Tools > Researcher ID.

Author ID is a unique identifier that consists of alphanumeric characters that enable researchers to manage their publication lists, track their times cited counts and h-index, identify potential collaborators and avoid author misidentification. It is assigned automatically by SCOPUS. You can find an author identifier by running a search for that author. It will appear underneath the author details.
Access: SCOPUS > Author Feedback Wizard> Researcher name.

Open Researcher and Contributor ID (ORCID) provides a persistent digital identifier that distinguishes the researcher from every other person and, through integration in key research workflows such as manuscript and grant submission, supports automated linkages between you and your professional activities ensuring that your work is recognized.
Access: www.orcid.org

A.3. Indicators of Quality in Scientific Production

Please add information on a) total number of citations, average number of citations during the last five years, b) total number of publications in the first quartile (Q1) and first decile (D1), c) h-index, d) thesis supervised, and e) any other indicators that you may consider relevant.

To calculate these values, use default data collected in the Web of Science or Scopus. When this is not possible, other indicators may be used, specifying the reference database.

PART B. FREE SUMMARY OF CV *(Max. of 3.500 characters, including spaces)*

Describe briefly your scientific career, the main scientific-technical achievements, and the mid-to-long term scientific-technical interests and objectives of your research agenda. Indicate any other aspects that you may consider important to understand your career path.

PART C. ACCOMPLISHMENTS (Order by typology)

Given the limitations in number of characters, please mention the most relevant achievements sorted by the typology that best suits your scientific profile. Please be clear and avoid ambiguities.

Use reverse chronological order within each section. Limit your merits over the past 5 years, except for those which have an extraordinary importance for your CV.

C.1. Publications
Include a full review of relevant 5 to 10 publications.

In case of an article, please include authors in order of signature, year of publication, title of the article, name of the journal, volume, start page to end page.
If it's a book or chapter of a book, include its publisher and ISBN also.
If there are many authors, please indicate the total number of signatories and the position of the researcher (total number/ position of researcher) as for example 95/18.

C.2. Participation in Research, Development and Innovation Projects
Indicate the most important projects in which you have participated (maximum 5 to 7 projects), including a) its reference, b) title, c) funding body and call for proposals, d) name of the principal investigator and his/her institution affiliation, e) date of start and end of the project, f) amount of subsidy, and g) your type of participation, e.g.: researcher, principal investigator, European project coordinator, etc..

C.3. Participation in Research, Development and Innovation Contracts
Indicate the most important contracts in which you have participated (maximum 5 to 7 contracts), including a) title, b) company or entity, c) name of principal investigator and his/her institution affiliation, d) date of start and end of the contract, and e) amount of funding.

C.4. Patents
Indicate the most important patents and other intellectual property in which you have collaborated. Give a) the order of signing authors, b) reference, c) title, d) priority countries, e) date, f) holder entity and companies that are exploiting the patents.

C.5, C.6, C.7… Other
By sequential numbering (C.5, C.6, C.7 ...) please include any other achievements that you deem necessary, such as for example: direction of works, participation in assessment or advisory tasks, membership of international committees, management of scientific activity, editorial boards, **scientific awards**, etc.

FINAL CONSIDERATIONS
Please remember that all the submitted achievements must be presented concisely, including dates or periods for each performance.

The short CV aims to facilitate, organize and streamline the evaluation process. The use of the individual researcher identifier facilitates access to the published scientific papers and information on the impact of each of them.

Remember that only CVs submitted either in this format or in CVN abridged version will be taken into consideration.