CV date	04/12/2021

Part A. Personal information

First and family name	Joaquin Teixidó Calvo		
Social Security, Passport, ID number	46320888S	Age	65
Researcher codes	Researcher ID	J-8543-2014	
	Código Orcid	0000-0002-3177-4151	

A.1. Current position

Name of University/Institution	CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS		
Dpto./Centro	Molecular Biomedicine. Centro de Investigaciones Biológicas Margarita Salas		
Address	Ramiro de Maeztu 9, 28040 Madrid		
Phone number	91-8373112	e-mail	joaquint@cib.csic.es
Current position	Profesor Investigación CSIC	From	25-04-2007
Espec. cód. UNESCO	2407		
Keywords	Melanoma, Cancer, Resistance, Signalling, Lymphocytes, Cell adhesion		

A.2. Education

Licenciatura/Grado/Doctorado	Universidad	Año
Degree in BiologicalSciences	Universidad Autónoma de Barcelona	1981
Doctor in BiologicalSciences	Universidad Autónoma de Madrid	1985

A.3. General indicators of quality of scientific production

- Number of sexenios de investigación: 5
- Number of supervised doctoral thesis in the last 10 years: 6
- Total Citations: 4064
- Average Citations per Article: 64.5
- Publications Q1: 50 (from 75; 66%)
- H-index: 34

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

My thesis work characterized the role of several ribosomal proteins in ribosome assembly and protein synthesis. These investigations led to several publications (Nucleic Acid Res, J. Mol. Biol). Later on in my first postdoctoral period, I joined Dr. Joan Masagué's lab in Worcester (UMass), where I was involved in several structural and functional studies of TGF-α. These studies were published in Nature, PNAS, Cell and J. Biol. Chem., amongst other. In my second post-doctoral phase, I moved to the lab of Dr. Martin Hemler (Dana Farber Cancer Inst), in Boston. There I started to become familiar with Immunology, which was added to my Cell Biology and Biochemistry background. Furthermore, I started in the early 90's to work with the α4β1 integrin. Important contributions to the field of cell adhesion came from my J. Clin. Invest. and J. Biol. Chem papers, with the demonstration that CD34+ bone marrow progenitors expressed functional α4β1. The J. Clin. Inv. paper is one of mi highest cited works.

Coming back to Spain, I performed my third post-doctoral period in the lab of Dr. Francisco Sánchez Madrid (Hospital de La Princesa). Here I went on with further characterization of α4β1, which after subsequent work at the Centro de Investigaciones Biológicas once I became Colaborador Científico (CSIC), gave my first publications funded by my first projects as independent researcher. An important breakthrough in my scientific career came when our laboratory started to functionally link chemokines and α4β1 in human BM progenitors, multiple myeloma (MM) and T lymphocytes. These studies were published in Blood, J. Biol. Chem, J. Immunol, Immunity and Mol. Biol. Cell. Remarkably, these manuscripts contributed to improve the knowledge of the regulation of integrins by chemokines, a key process both in normal immune response and in pathological conditions. At the same time, we began to study the expression and function of chemokine receptors on melanoma,

showing for the first time that these cells express the receptor CXCR4, which we later demonstrated to play important roles in melanoma metastasis. These studies were published in Cancer Res, J. Biol. Chem and J. Cell Sci.

Our present work focuses on several research lines. One is the characterization of molecular mechanisms associated to resistance of melanoma cells to MAPK inhibitors. We recently published two of our works in Cancer Res. Another area of research involves studies on the regulation of α4β1 integrin function by β1-binding cytoplasmic proteins. Specifically, we are working on the role of ICAP-1 in integrin-dependent and independent T and B lymphocyte development and maturation. Another area of research involves studies on multiple myeloma (MM). The same α4β1 integrin is our model in MM, as it plays key roles in the progression of MM. In this research line we are analyzing miRNA expression specifically controlled by α4β1 activity. We are also interested in unravelling the mechanisms associated to MM cell resistance to bortezomib, a current therapy against MM, especially on the relationships between resistance and α4β1. We just published our results in J. Pathol.

Importantly, I have been lucky to form excellent PhD students, and to collaborate with excellent investigators, both national and international, that have been fundamental to increase the quality of our investigations.

Parte C. RELEVANT MERITS

C.1. Publications (selection)

(AC): Author of correspondence

1. Sevilla-Movilla S, Fuentes P, Rodríguez-García Y, Arellano-Sánchez N, Krenn PW, Isern de Val S, Montero-Herradón S**,** García-Ceca J, Burdiel-Herencia V, Gardeta SR, Aguilera-Montilla N, Barrio-Alonso C[3], Crainiciuc G, Bouvard D, García-Pardo A, Zapata AG, Hidalgo A[|], Fässler R, Carrasco YR, Toribio ML and Teixidó J. ICAP-1 loss impairs $CD8^+$ thymocyte development and leads to reduced marginal zone B cells in mice. 2022, Eur. J. Immunol. In press. doi: 10.1002/eji.202149560
2. García-Ortiz A, Rodríguez-García Y, Encinas J, Maroto-Martín E, Castellano E, Teixidó J[*], Martínez-López J[*]. The Role of Tumor Microenvironment in Multiple Myeloma Development and Progression. 2021, *Cancers* Jan 9;13(2):217. doi: 10.3390/cancers13020217. ([*]equal senior contributor).
3. Sevilla-Movilla S, Arellano-Sánchez N, Martínez-Moreno M…and Teixidó J (AC) (13/13). Upregulated expression and function of the α4β1 integrin in multiple myeloma cells resistant to bortezomib. 2020, *J. Pathol.*252, 29-40
4. Benito-Jardón L, Díaz-Martínez M, Vaquero-Morales P, Esparis-Ogando A and Teixidó J. (AC) Resistance to MAPK inhibitors in melanoma involves activation of the IGF-1R-MEK5-Erk5 pathway. 2019. *Cancer Res*. 79, 2244-2256
5. Redondo-Muñoz J, García-Pardo A and Teixidó J. (AC) Molecular players in hematological tumor cell trafficking. 2019. *Frontiers in Immunol*. 10:156. doi: 10.3389/fimmu.2019.00156.
6. Díaz-Martínez M, Benito-Jardón L, Alonso L, Koetz-Ploch L, Hernando E and Teixidó J. (AC) MiR-204-5p and miR-211-5p contribute to BRAF inhibitor resistance of melanoma. 2018. *Cancer Res*. 78, 1017-1030
7. Gutiérrez-González A, Martinez-Moreno M, Samaniego R, Relloso M, ... Teixidó J, Sánchez-Mateos P. (AC) (9/10) Evaluation of the potential therapeutic benefits of macrophage reprogramming in multiple myeloma. 2016. *Blood*. 128, 2241-2252
8. Martínez-Moreno M., Leiva M, Sevilla-Movilla S, … and Teixidó J. (AC) (14/14) *In vivo* adhesion of malignant B cells to bone marrow microvasculature is regulated byα4β1cytoplasmic-binding proteins. 2016. *Leukemia*, 30, 861-872
9. Sosa-Costa A, Isern de Val S, Sevilla-Movilla S, Borgman KJE, Manzo C. Teixidó J[**](AC) and Garcia-Parajo MF[**](AC). Lateral Mobility and Nanoscale Spatial Arrangement of Chemokine-activated α4β1 Integrins on T Cells. 2016. *J. Biol. Chem*. 291 (40), 21053-62. [**]Equal contrib.
10. García-Bernal D, Redondo-Muñoz J, Dios-Esponera A,… and Teixidó J. (AC) (11/11) Sphingosine-1-phosphate upregulates chemokine-stimulated myeloma cell adhesion and migration involving α4β1 integrin through activation of DOCK2/Rac1 signalling. 2013. *J Pathol.* 229, 36-48

11. Coló GP, Hernández-Varas P, Lock J, Bartolomé RA, Arellano-Sánchez N, Strömblad S and Teixidó, J. (AC) Focal adhesion disassembly is regulated by a RIAM to MEK-1 pathway. 2012. *J. Cell Sci.*125, 5338–5352
12. Hernández-Varas P, Coló GP, ...and Teixidó J. (AC) 12/12) RIAM controls invasion and growth of melanoma cells. 2011, J. Biol. Chem. 286, 18492–18504
13. Estecha, A., Sánchez-Martín, L., Puig-Kröger, A., Bartolomé, RA, Teixido, J., Samaniego, R. and Sánchez-Mateos, P. Moesin orchestrates cortical polarity of melanoma tumour cells to initiate 3D invasion. 2009, J. Cell Sci. 122, 3492-3501.
14. Molina-Ortiz, I., Bartolomé, RA, Hernández-Varas, P. Colo, GP and Teixidó, J. Overexpression of E-cadherin on melanoma cells inhibits chemokine-promoted invasion involving p190RhoGAP/p120ctn-dependent inactivation of RhoA. 2009. J. Biol. Chem. 284: 15147-57
15. Bartolomé, RA,... and Teixidó, J. (AC) (12/12) The chemokine receptor CXCR4 and the metalloproteinase mt1-mmp are mutually required during melanoma metastasis to lungs. 2009. Amer. J. Pathol. 174:602-12.

C.2. Competitive funding (last 10 years)

1. Characterization of molecular mechanisms involved in thymocyte development and in melanoma cell resistance to MAP quinase inhibitors. PID2020-116291RB-I00. 2021-2024. 235.000 €. IP, Joaquin Teixidó Calvo
2. Characterization of molecular mechanisms involved in migration, survival and resistance to chemotherapy in multiple myeloma and melanoma. SAF2017-85146-R: 2018-2020. 217.800 €. IP: Joaquin Teixidó Calvo
3. Characterization of molecular pathways controlling cell motility in leukocyte trafficking and tumor cell invasion. SAF2014-53059-R: 2015-2017. 260.000 €. IP: Joaquin Teixidó Calvo.
4. Spanish Network of CooperativeResearch in Cancer. Ministry of Health RD12/0036/0061 (2012-2016). 300.000 €. IP: Joaquin Teixidó Calvo
5. Imaging, genomics and proteomics analyses of B cell hematological tumor progression. S2010/BMD-2314. Biomedicina. Comunidad de Madrid. 2012-2016. Coordinator, Angeles García Pardo. 621.000 € (to JT: 178.000 €). IP: Joaquin Teixidó Calvo
6. Characterization of the molecular mechanisms required for lymphocyte migration and for tumor cell invasion in response to chemokines. SAF2011-24022: 2012-2014. 240.100 €.IP: Joaquin Teixidó Calvo
7. Characterization of the signaling involved in chemokine stimulation of lymphocyte adhesion and invasion of tumor cells. SAF2008-00479: 2009-2011. 200.000 €. IP: Joaquin Teixidó Calvo

C.3. Supervised Doctoral Thesis (10 last years, from a total of 15 Thesis)

-Role of RIAM in invasion and focal adhesion dynamics in melanoma cells. Pablo Hernández Varas Universidad Complutense de Madrid. March 2011. Excellent Cum Laude

- Regulation by signalling proteins of chemokine-dependent adhesion mediated by leukocyte integrins Ana M. Dios Esponera. Universidad Complutense de Madrid. April 2014. Excellent Cum Laude

- Characterization of the inside-out signalling involved in the regulation of T lymphocyte adhesion dependent on the integrin VLA-4.Soledad Isern de Val. Universidad Complutense de Madrid. April 2016. Excellent Cum Laude

- Role of Src kinases in invasion and microRNAs in resistance to chemotherapy in melanoma cells Marta Díaz Martínez. Universidad Complutense de Madrid. June 2017. Excellent Cum Laude

- ICAP-1 regulates VLA-4-mediated cell adhesion and development of the immune system. Characterization of relationships between VLA-4 and resistance to bortezomib in multiple myeloma. Silvia Sevilla Movilla. Universidad Complutense de Madrid. November 2019. Excellent Cum Laude

- Characterization of molecular mechanisms associated to resistance of melanoma cells MAP kinase inhibitors. Lucía Benito Jardón. Universidad Complutense de Madrid. October 2020. Excellent Cum Laude

C.4. Training, Masters.

-**2010-2021:** Master in Molecular Biomedicine Molecular. Immune and Inflammatory diseases. Universidad Autónoma de Madrid.

- **2011-2021:** Master in: Mechanisms of Cell signalling. Universidad Complutense de Madrid

- **2019-2020:** Master Centro de Investigaciones Biológicas: Melanoma as a model

Curricular work, Fin de Grado (TFG) and Master (TFM)
Curricular: Luis Miguel del Castillo Lima (2015); Celia Barrio Alonso (2016); Paloma Vaquero Morales (2017); Rubén Tacero Puerto (2021)
TFG: Celia Barrio Alonso (2017); Paloma Vaquero Morales (2108);Yaíza Rodríguez García (2018)
TFM: Roger Dagà Millán (2016), Patricia Soto Bielicka (2016); Anna Sánchez Vencells (2017); Paloma Vaquero Morales (2109); Yaíza Rodríguez García (2019); Ignacio González López-Cepero (2021).

C.5. Conference Organization

- Symposium: Podosomes, Invadopodia and Focal Adhesions in Physiology and Pathology, September 2011. Madrid
- Symposium: NEOPLASBIM: B-cell malignancies: from the bench to the patient. Centro de Investigaciones Biológicas. Madrid. Octubre 2014

C.6. Invited lectures (selection, last 10 years):

- Src kinase downstream effectors in the control of melanoma metastasis. International Workshop on Metastasis Research. Torino, December 2010.
- Src kinases and focal adhesion proteins controlling melanoma metastasis. Centro Nacional de Microbiología (Instit. Salud Carlos III). February 2011.
- Dynamic associations between Gα13 and Blk in melanoma cells regulate Blk-dependent p190RhoGAP tyrosine phosphorylation, RhoA activation and cell invasión. 5th European Melanoma Workshop. Marseille, France. June 2013
- Stimulators and inhibitors of VLA-4 integrin activity. Max Planck Institute for Biochemistry. Munich, Germany. October 2016
- Role of miRNAs in resistance to inhibitors of the MAP kinase pathway in melanoma cells. Centro Nacional de Microbiología (Instit. Salud Carlos III). Madrid, November 2016
- The connections between mieloma resistance to proteasomal inhibitors and the VLA-4 integrin. Centro Nacional de Biotecnología. Madrid, October 2017
- Conexiones moleculares entre resistencia del mieloma a inhibidores del proteasoma y la integrina VLA-4. Hospital 12 de Octubre. Madrid. Diciembre 2017
- Role of the β1 integrin-binding partner ICAP-1 in immune cell adhesion and differentiation. 3rd European Chemokine and Cell Migration Conference, Salamanca, June 2019
- Resistance to MAPK inhibitors in melanoma involves activation of the IGF-1R-MEK5-Erk5 pathway. SEBBM Madrid, July 2019
- Mechanisms of resistance to MAPK-targeted therapy in melanoma. Reunión de Sociedades de Biociencias, Argentina, November 2021

C.7. Reviewer (selection)

Blood, Leukemia, Oncogene, Nature Medicine, J. Natl, Cancer Inst., J. Pathol., International J. Cancer, Haematologica, Brit. J. Pharmacol., Exp. Cell Res., J. Immunol., Eur. J. Immunol., Mol. Biol. Cell, Sci. Reports, Frontiers in Cell and Develop. Biol., Cell Death Disease, e-Life, J Invest. Dermatol.

C.8. Scientific management

-Deputy coordinator, Biology and Biomedicine area Comission. Consejo Superior Investigaciones Científicas (2008-2012)
- Expert, Projects Plan Nacional Biomedicina (SAF): 2012. 2013, 2015
- Evaluator ANEP (Plan Nacional, FIS, Ramón y Cajal, AECC, Proyectos Autonómicos,…), AGAUR