

<b>CV Date</b>	24/03/2022
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## Part A. PERSONAL INFORMATION

First Name *	Marta		
Family Name *	Dueñas Porto		
Sex *	Female	Date of Birth *	11/01/1968
ID number Social Security, Passport *	50341575A	Phone Number *	(34) 913466251
URL Web			
Email Address	marta.duenas@ciemat.es		
Researcher's identification number	Open Researcher and Contributor ID (ORCID) *	0000-0003-0857-9726	
	Researcher ID		
	Scopus Author ID		

\* Mandatory

### A.1. Current position

Job Title	Researcher		
Starting date	2009		
Institution	Center for Energetics, Enviromental and Tecnological Research (CIEMAT) And Foundation for Biomedical Research I+12.		
Department / Centre			
Country		Phone Number	
Keywords	Molecular mechanism of disease; Cell culture; Functional biology; Molecular evolution; Genetic engineering		

### A.2. Previous positions

Period	Job Title / Name of Employer / Country
2000 - 2007	Head of Genomics Department / Center for Genetic Engineering and Biotechnology
1995 - 1999	Postdoctoral Researcher / Center for Genetic Engineering and Biotechnology
1992 - 1995	Predoctoral scholarship / Lund University, Lund, Sweden
1990 - 1992	Researcher / Center for Genetic Engineering and Biotechnology

### A.3. Education

Degree/Master/PhD	University / Country	Year
Molecular Biology Doctor (Homologation)	Universidad Autónoma de Madrid	2009
Technical Doctor In Genetic Engineering and Biotechnology	Lund Technical University, Sweden	1995
Biology Science Degree	Universidad de la Habana, Cuba	1990
Genetic Engeering Thesis Degree	Universidad de la Habana	1990

### A.4. General quality indicators of scientific production

**Total Publications** 66

Publications as **First Author**: 15

Publications as **Corresponding Author** 9

**Cumulative Impact Index**: 304,53

**External Citations** Web of Science (WOS): 1322;

**Average Citations** (WOS): 27,16

**Index H** (WOS): 23.

Competitive Projects

As IP: 6, as Research Team: 22

Patents:6 (3 as IP)

### Course Organization

Internationals: 3

Nationals: 2

### Part B. CV SUMMARY

**Stays in Foreign Centers:** Postdoctoral stay at Wallenberg Laboratory, Sweden 1998 (24 weeks), at Uppsala University, Medical Genetic Department, Sweden 2000 (32 weeks) and Wellcome Trust Hinxton Center, UK. 2004 (2 weeks). **Research Projects:** As IP in **4 projects** financed in competitive calls (1997-99 funded by TWAS-Trieste, Italy; 2000-07 funded by the State Council, Cuba; 2012-14 financed by the FMM, Spain; 2019-2019 Funded by Ferring Innovation, San Diego, USA. As research team in 22 projects. **Courses Organization:** I have organized and being scientific director of 4 international courses (1997, 2003, 2005 and 2006) and a Cuban national course (2002). **Direction of Research Lines:** In 1996-99 Leader of scFv expression group in bacteriophages as diagnostic and clinical tools (CIGB, Cuba). During 2000-07 I was Head of the Genomics Department directing 14 researchers in Population genomics projects (CIGB, Cuba). Since 2015, I have led the study of the Tumor-immune system interactome in bladder cancer and the use of Liquid biopsy in bladder cancer screening and prognosis (CIEMAT, Spain). **Thesis Direction:** I have directed 2 doctoral theses (2011 UH, Cuba and 2019 UCM, Madrid), and I currently directing three other predoctoral students, 6 master thesis, and 8 end of degree thesis. **Teaching Activity:** I was professor of the national degree program of the School of Biology at Havana University (2003-07). Professor of the postgraduate course of the Biology Sciences Doctoral Program “Advanced Strategies in Molecular Biology” (2004, 05 and 06). Professor of Master's Degree in Thoracic Oncology at the CEU-Cardenal Herrera University “Molecular Bases of Cancer” thematic area 2017-18 and 2018-19. Professor at the Latin American Forum of training of specialists in genitourinary cancer. Hosp. October 12, 2016 and 2017. **Thesis courts:** I have participated in 8 doctoral thesis courts (7 in Cuba, 1 in Spain). I was a permanent member of the National Court of Biological Sciences, Cuba.

### Part C. RELEVANT ACCOMPLISHMENTS

#### C.1. Publications

AC: corresponding author. (n° x / n° y): position / total authors. If applicable, indicate the number of citations

- 1 Scientific paper.** Lodewijk, L; Bernardini, A; Suárez-Cabrera, C; et al; Manso, L. (13/15). 2022. Genomic landscape and immune-related gene expression profiling of epithelial ovarian cancer after neoadjuvant chemotherapy NPJ Precis Oncol .6-1, pp.7. <https://doi.org/10.1038/s41698-021-00247-3>
- 2 Scientific paper.** Bernardini, A.; Dueñas, M.; Martín-Soberon, M.C.; Rubio, C.; Suarez-Cabrera, C.; Ruiz-Palomares, R.; Munera-Maravilla, E.; Lázaro, S.; Lodewijk, I.; Rueda, D.; Gómez-Sánchez, D.; Alonso-Gordoa, T.; Puente, J.; Pinto, Á.; González-Peramato, P.; Aguado, C.; Herrera, M.; López, F.; Martinez, V.M.G; Morales, L.; Castellano, D.; Paramio, J.M.; de Velasco, G.(2/23). 2022. Genomic Landscape of Vinflunine Response in Metastatic Urothelial Cancer Cancers. 14-2, pp.378. <https://doi.org/10.3390/cancers14020378>

- 3 **Scientific paper.** Rubio C, Avendaño-Ortiz J, Ruiz-Palomares R, Karaivanova V, Alberquilla O, Sánchez-Domínguez R,; Casavilla-Dueñas JC, Montalbán-Hernández K, Lodewijk I, Rodríguez-Izquierdo M,; Munera-Maravilla E, Nunes SP, Suárez-Cabrera C, Pérez-Crespo M, Martínez VG, Morales L; Pérez-Escavy M, Alonso-Sánchez M, Lozano-Rodríguez R, Cueto FJ, Aguirre LA, Guerrero-Ramos F,; Paramio JM, López-Collazo E, Dueñas M.(23/23). 2022. Toward Tumor Fight and Tumor Microenvironment Remodeling: PBA Induces Cell Cycle Arrest and Reduces Tumor Hybrid Cells' Pluripotency in Bladder Cancer.Cancers. 14-2, pp.287. <https://doi.org/10.3390/cancers14020287>
- 4 **Scientific paper.** Pernas, S; Villagrasa, P; Vivancos, A; et al; Dueñas, M; Ciruelos, E. (10/22). 2021. First Nationwide Molecular Screening Program in Spain for Patients With Advanced Breast Cancer: Results From the AGATA SOLTI-1301 Study.Frontiers in oncology. 4-11, pp.744112. <https://doi.org/doi:10.3389/fonc.2022.860848>.
- 5 **Scientific paper.** S Carvalho; C Andreu; D Ferreira; et al; ;. (10/14). 2020. Microfluidic-isolation of exfoliated tumor cells from urine: Sialyl-Tn as a new urinary biomarker in bladder cancer Frontiers in Oncology. pp.doi.org/10.3389/fonc.2020.01774. <https://doi.org/10.3389/fonc.2020.01774>
- 6 **Scientific paper.** Dueñas, M.; Pérez Figueroa, A.; Oliveira, C.; et al; Martínez Fernández, M.(1/9). 2019. Gene Expression Analyses in Non Muscle Invasive Bladder Cancer Reveals a Role for Alternative Splicing and Tp53 Status.Scientific reports. 9-1, pp.10362. ISSN 2045-2322. <https://doi.org/doi:10.1038/s41598-019-46652-4>.
- 7 **Scientific paper.** Segovia, C.; San José Enériz, E.; Munera Maravilla, E.; et al; Villacampa, F.; Paramio, JM.(20/27). 2019. Inhibition of a G9a/DNMT network triggers immune-mediated bladder cancer regression.Nature medicine. 25-7, pp.1073-1081. ISSN 1546-170X. <https://doi.org/doi:10.1038/s41591-019-0499-y>
- 8 **Scientific paper.** Rubio, C.; Martínez Fernández, M.; Segovia, C.; et al; Dueñas, M.; Paramio, JM.(24/25). 2019. CDK4/6 Inhibitor as a Novel Therapeutic Approach for Advanced Bladder Cancer Independently of [RB1] Status.Clinical cancer research : an official journal of the American Association for Cancer Research. 25-1, pp.390-402. ISSN 1078-0432. <https://doi.org/10.1158/1078-0432.CCR-18-0685>
- 9 **Scientific paper.** García Escudero, R.; Segrelles, C.; Dueñas, M.; et al; Lorz, C.(3/13). 2018. Overexpression of PIK3CA in head and neck squamous cell carcinoma is associated with poor outcome and activation of the YAP pathway.Oral oncology. 79, pp.55-63. ISSN 1879-0593. <https://doi.org/10.1016/j.oraloncology.2018.02.014>
- 10 **Scientific paper.** Martínez, VG.; Rubio, C.; Martínez Fernández, M.; et al; Dueñas, M. (AC). (18/18). 2017. BMP4 Induces M2 Macrophage Polarization and Favors Tumor Progression in Bladder Cancer.Corresponding Author Clinical cancer research : an official journal of the American Association for Cancer Research. 23-23, pp.7388-7399. ISSN 1078-0432. <https://doi.org/10.1158/1078-0432.CCR-17-1004>.
- 11 **Scientific paper.** N Lainez; Sanz; J Puente; et al;. (3/23). 2017. Novel potential predictive markers of sunitinib outcomes in long-term responders versus primary refractory patients with metastatic clear-cell renal cell carcinoma..Oncotarget.28-8, pp.30410-30421. <https://doi.org/10.18632/oncotarget.16494>.
- 12 **Scientific paper.** C Segovia; M Martínez-Fernández; M Dueñas; et al;. (3/10). 2017. Opposing roles of PIK3CA gene alterations to EZH2 signaling in non-muscle invasive bladder cancer. Co-First Author Oncotarget. 7-8, pp.10531-10542. <https://doi.org/10.18632/oncotarget.14453>.
- 13 **Scientific paper.** Martínez Fernández, M.; Paramio, JM.; Dueñas, M. (AC). (3/3). 2016. RNA Detection in Urine: From RNA Extraction to Good Normalizer Molecules.Corresponding Author The Journal of molecular diagnostics : JMD. 18-1, pp.15-22. ISSN 1943-7811. <https://doi.org/10.1016/j.jmoldx.2015.07.008>
- 14 **Book chapter.** E Munera-Maravilla; JM Paramio; (AC). (3/3). 2019. Targeting histone modifications in cancer immunotherapy. Corresponding Author.Targeting histone modifications in cancer immunotherapy. Elsevier. 9. <https://doi.org/doi.org/10.1016/B978-0-12-816422-8.00016-7>

- 15 Review.** I Lodewijk; SP Nunes; C Jerónimo; M Dueñas; JM Paramio. (4/5). 2021. Tackling tumor microenvironment through epigenetic tools to improve cancer immunotherapy Clinical epigenetics. Springer Nature. 13-63, pp.10.1186/s13148-021-01046-0. <https://doi.org/10.1186/s13148-021-01046-0>
- 16 Review.** VG Martínez; E Munera-Maravilla; A Bernardini; et al; ;. (7/9). 2019. Epigenetics of bladder cancer: Where biomarkers and therapeutic targets meet. Frontiers in Genetics. 10-1125. <https://doi.org/doi.org/10.3389/fgene.2019.01125>
- 17 Review.** Rubio, C.; Munera Maravilla, E.; Lodewijk, I.; Suarez Cabrera, C.; Karaivanova, V.; Ruiz Palomares, R.; Paramio, JM.; Dueñas, M. (AC). (8/8). 2019. Macrophage polarization as a novel weapon in conditioning tumor microenvironment for bladder cancer: can we turn demons into gods?. Corresponding Author Clinical & translational Oncology. 21-4, pp.391-403. ISSN 1699-3055. <https://doi.org/10.1007/s12094-018-1952-y>
- 18 Review.** Cristian Suarez; Jesus Paramio; Alejandra Bernardini; et al;. (2/9). 2018. Liquid Biopsy Biomarkers in Bladder Cancer: A Current Need for Patient Diagnosis and Monitoring. Int J Mol Sci. 19-9. <https://doi.org/10.3390/ijms19092514>.

### C.3. Research projects and contracts

- 1 Project.** BlaDimiR. Optimización de un dispositivo electrónico para diagnóstico y pronóstico de respuesta a BCG en biopsia líquida para pacientes de cáncer de vejiga.. (CIEMAT-Hospital 12 de Octubre). 01/01/2021-31/12/2023. 64.900 €.
- 2 Project.** Generación y caracterización de fragmentos de anticuerpos tipo scfv tumor-especificos como nuevas estrategias inmunomoduladoras y de biopsia líquida para pacientes de cáncer.. (CIEMAT-Hospital 12 de Octubre). 01/01/2021-31/12/2023. 181.000 €.
- 3 Project.** New disease models and diagnostic tools for head and neck squamous cell carcinoma in fanconi anemia patients .. 01/11/2018-31/12/2021. 150.000 €.
- 4 Project.** Prognostic and predictive value of immune genomic signatures in correlation with homologous recombination deficiency in high grade serous ovarian cancer. (Hospital 12 de Octubre). 01/01/2017-21/12/2021.
- 5 Project.** Estudio de fase II para la evaluación del tratamiento neoadyuvante con cabozantinib previo a la nefrectomía citorrreductora en pacientes con cáncer de células renales localmente avanzado o metastásico. (Hospital 12 de Octubre). 01/01/2019-01/01/2021.
- 6 Project.** Phase Ib trial of Atezolizumab and BCG in high risk BCG naïve non-muscle invasive bladder cancer (NMIBC) patients.. (Hospital 12 de Octubre). 01/01/2018-01/01/2021.
- 7 Project.** BlaDimiR. NUEVO MÉTODO PARA DIAGNÓSTICO DE CÁNCER DE VEJIGA.. Madri+D. Marta Dueñas Porto. (Health Start Madri+D). 01/06/2019-04/03/2020. 12.000 €. Principal investigator.
- 8 Project.** Genome characterization in extreme responders to identify the basis for Vinflunine Sensitivity in Bladder Cancer. (Hospital 12 de Octubre). 01/01/2017-01/01/2020.
- 9 Project.** Evaluation of miRNAs and miRNA derived peptides (miPEPs) in liquid biopsies for bladder cancer diagnosis, prognosis and BCG treatment response.. Ferring Pharmaceuticals. Marta Dueñas. (Fundación de Investigación Hospital 12 de Octubre). 01/01/2019-31/12/2019. 115.000 €. Principal investigator.
- 10 Project.** Centro de Investigación Biomédica en Red de Cáncer CIBERONC. CB16/12/00228. Jesús M Paramio. From 2017. 153.000 €.
- 11 Project.** Biomarkers in mRCC treated with SUT and-or AXI\_ Midkine as predictor of resistance to AXI and large transcriptome analysis to identify other biomarkers of resistance. Tipo de contrato: Convenio de ayuda a la investigación Empresa/Administración financiadora: PFIZER. D Castellano. From 2016.
- 12 Project.** Discovery, Validation and Implementation of Biomarkers for Precision Oncology. ISCIII PIE15/00081. Luis Paz Ares. From 2016. 1.083.225 €.
- 13 Project.** Understanding Bladder Cancer Through Genetically Engineered Mouse Models Of Preclinical Application. SAF2015-66015-R. Jesús M Paramio. From 2016. 363.000 €.
- 14 Project.** Evaluación de Biomarcadores de Respuesta a Sunitinib (SuLong) Tipo de contrato: Convenio de ayuda a la investigación Empresa/Administración financiadora: PFIZER. Jesús M Paramio. From 2015.

- 15 Project.** Evaluación de Palbociclib en líneas celulares de carcinoma urotelial Tipo de contrato: Convenio de ayuda a la investigación Empresa/Administración financiadora: PFIZER. Jesús M Paramio. From 2015.
- 16 Contract.** Funcionario de Carrera Investigador Titular Centro de Investigaciones Energéticas, medioambientales y Tecnológicas. From 12/11/2021.
- 17 Contract.** Contrato Laboral Titulado Superior Doctor Centro de Investigaciones Energéticas, medioambientales y Tecnológicas. From 01/12/2009.
- 18 Contract.** Jefe Departamento Genómica Centro de Ingeniería Genética y Biotecnología. From 01/01/2000.
- 19 Contract.** Investigador Postdoctoral Centro de Ingeniería Genética y Biotecnología. From 01/01/1996.
- 20 Contract.** Becario Predoctoral Dpto Inmunotecnología, Universidad de Lund. From 01/03/1992.
- 21 Contract.** Titulado superior Centro de Ingeniería Genética y Biotecnología. 01/01/1990-01/01/1994.

#### **C.4. Activities of technology / knowledge transfer and results exploitation**

- 1** M. Dueñas; C. Suarez; J. M. Paramio; F Guerrero. PCT/ES2021/070204. BIOMARCADORES PARA PREDECIR LA RESPUESTA DE UN SUJETO A UNA TERAPIA CON BCG, MÉTODOS Y USOS BASADOS EN LOS MISMOS.. Main Inventor. Spain. 21/03/2021. CIEMAT-Hospital 12 de Octubre.
- 2** M. Dueñas; C. Suarez; J. M. Paramio; F Guerrero. P202030244.. DBIOMARCADORES PARA PREDECIR LA RESPUESTA DE UN SUJETO A UNA TERAPIA CON BCG, MÉTODOS Y USOS BASADOS EN LOS MISMOS.. Main Inventor. Spain. 26/02/2021. CIEMAT-Hospital 12 de Octubre.
- 3** Galbán; E.; Martín; A. and Dueñas; M.ber: PCT/CU02/0098.. METHOD OF OBTAINING DNA REPLICATION MINICIRCLES WHICH ARE INTENDED TO BE USED FOR GENE TRANSFER OR AS IMMUNOMODULATORS. Application Cuba. 2003. CIGB, Cuba.
- 4** MATEO DE ACOSTA,CM; ROQUE NAVARRO,LT; MORALES MORALES,A; PEREZ RODRIGUEZ,R; AYALA AVILA,M; GAVILONDO COWLEY,JV; DUEÑAS PORTO,M; BELL GARCIA,H; RENGIFO CALZADO,E; IZNAGA ESCOBAR,N; RAMOS ZUZARTE,M. 196/1999. Antibodies and Fv fragment that recognize the ior-C2 antigen Cuba. 1999. CIM, Cuba.
- 5** : Dueñas; M.; Gavilondo; J.V.; Ayala; M.; Freyre; F.M; Bell; H. 1998/0493. PROTEINAS DE FUSION RECOMBINANTES BASADAS EN ADHESINAS BACTERIANAS PARA EL DESARROLLO DE ENSAYOS DIAGNOSTICOS. Main Inventor Cuba. 1997. CIGB, Cuba.
- 6** Borrebaeck; C.A.K. and Dueñas; M.1995/0160. Method of selecting specific bacteriophages. Application Sweden. 1993. Biolvent, Suecia.

#### **C.5. Stays in public or private R&D centres**

- 1** Wellcome Trust Genome Campus, Hinxton, U.K.. Hinxton. From 2003. 14 days. Guest.
- 2** Universidad de Uppsala, Departamento de Genética Médica. Sweden. Uppsala. From 2000. 56 days. Post-doctoral.
- 3** Universidad de Lund, Laboratorio Wallenberg. Sweden. Lund. From 1998. 252 days. Post-doctoral.
- 4** Universidad Nacional Autónoma de México. Mexico. Ciudad México, DF. From 1997. 28 days. Guest.
- 5** Laboratorio Wallenberg, Universidad de Lund.. Sweden. Lund. From 1992. 1344 days. Doctorate.