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AGENCIA  
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## CURRICULUM VITAE

### PERSONAL INFORMATION

CV date 02/10/2023

First name	Caroline E.		
Family name	Nunes-Xavier		
Gender (*)	Female	Birth date	
Social Security, Passport, ID number	NIE:		
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### Current position

Position	Group leader of Immuno-Oncology group, Miguel Servet Researcher		
Initial date	01/01/2021		
Institution	Biobizkaia Health Research Institute		
Department/Center	Cancer Unit		
Country	Spain	Teleph. number	946007249
Key words	Biomedicine; Neuroblastoma; Immunotherapy; Urological cancers		

### Previous positions

Period	Position/Institution/Country
2015 - 2020	PI, Marie Curie Fellow / Institute for Cancer Research / Oslo University Hospital Radiumhospitalet / Norway
2013 - 2015	Postdoctoral Fellow / Institute for Cancer Research / Oslo University Hospital Radiumhospitalet / Norway
2012 - 2013	Researcher / The Norwegian School of Veterinary Science / Norway
2007 - 2012	Predocctoral Marie Curie Fellow / Centro de Investigación Príncipe Felipe / Spain

### Education

PhD, Licensed, Graduate	University/Country	Year
European PhD in Biotechnology	University of Valencia / Spain	2011
Master in Mol Biol, Genetics & Cell Biol	University of Valencia / Spain	2007
Master in Mol Biol, Biochem & Physiol	University of Oslo / Norway	2006
Bachelor in Natural Sciences	University of Oslo / Norway	2005

### Publications

- Torices L, **Nunes-Xavier CE**, López JI, Pulido R. (2/4). Novel anti-PTEN C2 domain monoclonal antibodies to analyse the expression and function of PTEN isoform variants. PLoS One. 2023. 18(8): e0289369.
- Nunes-Xavier CE\***, Emaldi M, Mingo J, Øyjord T, Mælandsmo GM, Fodstad Ø, Errarte P, Larrinaga G, Llarena R, López JI, Pulido R. (1/11). The expression pattern of pyruvate dehydrogenase kinases predicts prognosis and correlates with immune exhaustion in clear cell renal cell carcinoma. Sci Rep. 2023. 13 (1), 7339
- Pulido R and **Nunes-Xavier CE\***. (2/2). Editorial: Cell and Developmental Signalling in Neuroblastoma. Front Cell Dev Biol. 2023. 10:1126352
- Nunes-Xavier CE\***, Emaldi M, Guldvik IJ, Ramberg H, Taskén KA, Mælandsmo GM, Fodstad Ø, Llarena R, Pulido R, López JI. (1/10). Correlation of expression of Major Vault Protein with androgen receptor and immune checkpoint protein B7-H3, and with poor prognosis in prostate cancer. Pathol Res Pract. 2023. 241:154243.

5. Pulido R, **Nunes-Xavier CE\***. (2/2). Hopes on immunotherapy targeting B7-H3 in neuroblastoma. *Transl Oncol*. 2023. 27:101580.
6. Torices L, Mingo J, Rodríguez-Escudero I, Fernández-Acero T, Luna S, **Nunes-Xavier CE**, López JI, Mercadillo F, Currás M, Urioste M, Molina M, Cid VJ, Pulido R. (6/13). Functional analysis of PTEN variants of unknown significance from PHTS patients unveils complex patterns of PTEN biological activity in disease. *Eur J Hum Genet*. 2022. 31(5):568-577.
7. **Nunes-Xavier CE\***, Mingo J, Emaldi M, Flem-Karlsen K, Mælandsmo GM, Fodstad Ø, Llarena R, López JI, Pulido R. (1/9) Heterogeneous Expression and Subcellular Localization of Pyruvate Dehydrogenase Complex in Prostate Cancer. *Front Oncol*. 2022. 12:873516.
8. Emaldi M, **Nunes-Xavier CE\***. (2/2) B7-H4 Immune Checkpoint Protein Affects Viability and Targeted Therapy of Renal Cancer Cells. *Cells*. 2022. 11(9):1448.
9. Alaña L#, **Nunes-Xavier CE#**, Zaldumbide L, Martín-Guerrero I, Mosteiro L, Alba-Pavón P, Villate O, García-Obregón S, González-García H, Herraiz R, Astigarraga I, Pulido R, García-Ariza M. (2/13) Identification and Functional Analysis of a Novel CTNNB1 Mutation in Pediatric Medulloblastoma. *Cancers (Basel)*. 2022. 14(2):421. # co-first authors
10. **Nunes-Xavier CE\***, Zaldumbide L, Mosteiro L, López-Almaraz R, García de Andoin N, Aguirre P, Emaldi M, Torices L, López JI, Pulido R. (1/10) Protein Tyrosine Phosphatases in Neuroblastoma: Emerging Roles as Biomarkers and Therapeutic Targets. *Front Cell Dev Biol*. 2021. 9:811297.
11. Larrinaga G, Calvete-Candenas J, Solano-Iturri JD, Martín AM, Pueyo A, **Nunes-Xavier CE**, Pulido R, Dorado JF, López JI, Angulo JC. (6/10) (Pro)renin Receptor Is a Novel Independent Prognostic Marker in Invasive Urothelial Carcinoma of the Bladder. *Cancers (Basel)*. 2021. 13(22):5642.
12. **Nunes-Xavier CE\***, Kildal W, Kleppe A, Danielsen HE, Waehre H, Llarena R, Maelandsmo GM, Fodstad Ø, Pulido R, López JI. (1/10) Immune checkpoint B7-H3 protein expression is associated with poor outcome and androgen receptor status in prostate cancer. *Prostate*. 2021. 81(12):838-848.
13. Luna S, Torices L, Mingo J, Amo L, Rodríguez-Escudero I, Ruiz-Ibarlucea P, Erramuzpe A, Cortés JM, Tejada MI, Molina M, **Nunes-Xavier CE**, López JI, Cid VJ, Pulido R. (11/14) A global analysis of the reconstitution of PTEN function by translational readthrough of PTEN pathogenic premature termination codons. *Hum Mutat*. 2021. 42(5):551-566.
14. Torices L, de Las Heras J, Arango-Lasprilla JC, Cortés JM, **Nunes-Xavier CE\***, Pulido R. (5/6) MMADHC premature termination codons in the pathogenesis of cobalamin D disorder: Potential of translational readthrough reconstitution. *Mol Genet Metab Rep*. 2021. 26:100710.
15. De Las Heras J, Diez I, Jimenez-Marin A, Cabrera A, Ramos-Usuga D, Diaz-Fernandez MV, Torices L, **Nunes-Xavier CE**, Pulido R, Arango-Lasprilla JC, Cortes JM. (8/11). Brain Circuit Alterations and Cognitive Disability in Late-Onset Cobalamin D Disorder. *J Clin Med*. 2020. 9(4):990.
16. Flem-Karlsen K, Fodstad Ø, **Nunes-Xavier CE\***. (3/3). B7-H3 Immune Checkpoint Protein in Human Cancer. *Curr Med Chem*. 2020. 27(24):4062-4086.
17. **Nunes-Xavier CE\***, Aurtenetxe O, Zaldumbide L, López-Almaraz R, Erramuzpe A, Cortés JM, López JI, Pulido R. (1/8). Protein tyrosine phosphatase PTPN1 modulates cell growth and associates with poor outcome in human neuroblastoma. *Diagn Pathol*. 2019. 14(1):134.
18. Pulido R, Mingo J, Gaafar A, **Nunes-Xavier CE**, Luna S, Torices L, Angulo JC, López JI. (4/8). Precise Immunodetection of PTEN Protein in Human Neoplasia. *Cold Spring Harb Perspect Med*. 2019. 9(12):a036293.
19. Calvete J, Larrinaga G, Errarte P, Martín AM, Dotor A, Esquinas C, **Nunes-Xavier CE**, Pulido R, López JI, Angulo JC. (7/10). The coexpression of fibroblast activation protein (FAP) and basal-type markers (CK 5/6 and CD44) predicts prognosis in high-grade invasive urothelial carcinoma of the bladder. *Hum Pathol*. 2019. 91:61-68.
20. Mingo J, Luna S, Gaafar A, **Nunes-Xavier CE**, Torices L, Mosteiro L, Ruiz R, Guerra I, Llarena R, Angulo JC, López JI, Pulido R. (4/12). Precise definition of PTEN C-terminal epitopes and its implications in clinical oncology. *NPJ Precis Oncol*. 2019. 3:11.

21. Flem-Karlsen K, Tekle C, Øyjord T, Flørenes VA, Mælandsmo GM, Fodstad Ø, **Nunes-Xavier CE\***. (7/7). p38 MAPK activation through B7-H3-mediated DUSP10 repression promotes chemoresistance. *Sci Rep*. 2019. 9(1):5839.
22. **Nunes-Xavier CE\***, Zaldumbide L, Aurtenetxe O, López-Almaraz R, López JI, Pulido R. (1/6) Dual-Specificity Phosphatases in Neuroblastoma Cell Growth and Differentiation. *Int J Mol Sci*. 2019. 20(5):1170.
23. **Nunes-Xavier CE**, Angulo JC, Pulido R, López JI. (1/4). A Critical Insight into the Clinical Translation of PD-1/PD-L1 Blockade Therapy in Clear Cell Renal Cell Carcinoma. *Curr Urol Rep*. 2019. 20(1):1.
24. **Nunes-Xavier CE**, Mingo J, López JI, Pulido R. (1/4). The role of protein tyrosine phosphatases in prostate cancer biology. *BBA Mol Cell Res*. 2019. 1866(1):102-113.
25. Aurtenetxe O, Zaldumbide L, Erramuzpe A, López R, López JI, Cortés JM, Pulido R, **Nunes-Xavier CE\***. (8/8) DUSP5 expression associates with poor prognosis in human neuroblastoma. *Exp Mol Pathol*. 2018. 105(3):272-278.
26. Flem-Karlsen K, Fodstad Ø, Tan M, **Nunes-Xavier CE\***. (4/4). B7-H3 in Cancer - Beyond Immune Regulation. *Trends Cancer*. 2018. 4(6):401-404.
27. Flem-Karlsen K, Tekle C, Andersson Y, Flatmark K, Fodstad Ø, **Nunes-Xavier CE.\*** (6/6). Immunoregulatory protein B7-H3 promotes growth and decreases sensitivity to therapy in metastatic melanoma cells. *Pigment Cell Melanoma Res*. 2017. 30(5):467-476.
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29. **Nunes-Xavier CE\***, Karlsen KF, Tekle C, Pedersen C, Øyjord T, Hongisto V, Nesland JM, Tan M, Sahlberg KK, Fodstad Ø. (1/10). Decreased expression of B7-H3 reduces the glycolytic capacity and sensitizes breast cancer cells to AKT/mTOR inhibitors. *Oncotarget*. 2016. 7(6):6891-901.
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31. Alonso A, **Nunes-Xavier CE**, Bayón Y, Pulido R. (2/4). The Extended Family of Protein Tyrosine Phosphatases. *Methods Mol Biol*. 2016. 1447:1-23.
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33. Nygren MK, Tekle C, Ingebrigtsen VA, Mäkelä R, Krohn M, Aure MR, **Nunes-Xavier CE**, Perälä M, Tramm T, Alsner J, Overgaard J, Nesland JM, Borgen E, Børresen-Dale AL, Fodstad Ø, Sahlberg KK, Leivonen SK. (7/17). Identifying microRNAs regulating B7-H3 in breast cancer: the clinical impact of microRNA-29c. *Br J Cancer*. 2014. 110(8):2072-80.
34. **Nunes-Xavier CE**, Martín-Pérez J, Elson A, Pulido R. Protein tyrosine phosphatases as novel targets in breast cancer therapy. *BBA Reviews in Cancer*. 2013. 1836(2):211-26.
35. Cejudo-Marín R, Tárrega C, **Nunes-Xavier CE**, Pulido R. (3/4). Caspase-3 cleavage of DUSP6/MKP3 at the interdomain region generates active MKP3 fragments that regulate ERK1/2 subcellular localization and function. *J Mol Biol*. 2012. 420(1-2):128-38.
36. **Nunes-Xavier CE**, Elson A, Pulido R. (1/3). Epidermal growth factor receptor (EGFR)-mediated positive feedback of protein-tyrosine phosphatase epsilon (PTPepsilon) on ERK1/2 and AKT protein pathways is required for survival of human breast cancer cells. *J Biol Chem*. 2012. 287(5):3433-44.
37. **Nunes-Xavier C**, Romá-Mateo C, Ríos P, Tárrega C, Cejudo-Marín R, Tabernero L, Pulido R. (1/7). Dual-specificity MAP kinase phosphatases as targets of cancer treatment. *Anticancer Agents Med Chem*. 2011. 11(1):109-32.
38. Tárrega C<sup>1</sup>, **Nunes-Xavier C**<sup>1</sup>, Cejudo-Marín R, Martín-Pérez J, Pulido R. (2/5). Studying the regulation of MAP Kinase by MAP Kinase phosphatases in vitro and in cell systems. *Methods Mol Biol*. 2010; 661:305-21. (<sup>1</sup>equal contribution)
39. **Nunes-Xavier CE**, Tárrega C, Cejudo-Marín R, Frijhoff J, Sandin A, Ostman A, Pulido R. (1/7). Differential up-regulation of MAP kinase phosphatases MKP3/DUSP6 and DUSP5 by Ets2 and c-Jun converge in the control of the growth arrest versus proliferation response of MCF-7 breast cancer cells to phorbol ester. *J Biol Chem*. 2010. 285(34):26417-30.