



## CURRICULUM VITAE ABBREVIADO (CVA)

### Part A. PERSONAL INFORMATION

First name	Raúl Víctor		CV date: 17/12/2025
Family name	DURAN DIAZ		
Gender	Male	Birthdate:	**/**/****
ID number	*****	*****	
e-mail	*****		
Open Researcher and Contributor ID (ORCID)	0000-0002-2249-9215		

#### A1. Current position

Position	Research Scientist ( <i>Investigador Científico</i> )		
Initial date	15/12/2025		
Institution	Consejo Superior de Investigaciones Científicas - CSIC		
Department/Center	*****		
Country	Spain	Teleph. number	*****
Key words	cancer, metabolism, cell signaling, mTOR, autophagy		

#### A2. Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
2018 - 2025	Senior Research Associate ( <i>Científico Titular</i> ), Consejo Superior de Investigaciones Científicas - CSIC, Seville, Spain.
2013 - 2018	Group Leader, Group of Metabolism and Cell Signaling, Institut Européen de Chimie et Biologie, Pessac, France.
2015 - 2018	Senior Research Associate ( <i>Chargé de Recherche CR1</i> ), U1218 INSERM, Bordeaux, France (currently in leave of absence).
2013 - 2015	Research Associate, Fondation pour la Recherche Médicale / SIRIC-BRIO, U916 INSERM, Pessac, France.
2010 - 2013	Senior Postdoctoral Researcher, Cell Growth Group (Michael N. Hall), Biozentrum - University of Basel, Basel, Switzerland.
2006 - 2009	Postdoctoral Researcher Apoptosis and Tumour Metabolism Group (Eyal Gottlieb), Beatson Institute for Cancer Research, Glasgow, UK.

#### A3. Education

PhD, Graduate	University/Country	Year
PhD in Biochemistry	University of Seville	2005
BSc in Biology	University of Seville	2000

### Part B. CV SUMMARY (*max. 5000 characters, including spaces*)

I obtained my PhD in Biochemistry at the University of Seville (Spain) in 2005 working on cellular bioenergetics. Then, I joined the lab of Prof. Eyal Gottlieb at the Beatson Institute for Cancer Research (Glasgow, UK) as a postdoctoral researcher to extend my expertise on broader aspects of cancer metabolism. Later, I moved to the lab of Prof. Michael N. Hall at the Biozentrum (Switzerland) as a senior postdoc to study the de-regulation of cellular signaling during cancer. In 2013 I joined the *Institut Européen de Chimie et Biologie* (Pessac, France) as a Group Leader (INSERM, CR position), integrating my previous expertise to investigate the crosstalk between metabolism and cell signaling in cancer cells. In 2018 I moved my lab to the *Centro Andaluz de Biología Molecular y Medicina Regenerativa - CABIMER*, upon my assignment as Senior Research Associate (*Científico Titular*) at CSIC. Since then, I am the **Group Leader of the Group of Metabolism and Cell Signaling**, and in the period 2019-2022 I was the **Director of the Department of Dynamics and Cell Signaling at CABIMER**. In the period 2020-2024 I was the **Deputy Director of CABIMER**. In 2025, I was promoted to Research Scientist (*Investigador Científico*) at CSIC. Currently, I am a **member of the Executive Committee of the CONEXION CANCER-CSIC**, and I serve as **Associate Editor of the journal *Cancer & Metabolism***. Since January 2025 I serve as **associate evaluator (gestor) of the Spanish Agency of Investigation (AEI)**, in the Biomedicine – Cancer commission. My team investigates the crosstalk between the changes in the metabolism of cancer cells and the deregulation of cellular signaling during malignant transformation.



Particularly, during last years, we established a mechanistic connection between the metabolism of the important amino acid glutamine and the activation of the mTOR (mammalian target of rapamycin) pathway, a central controller of autophagy and cell growth. Both glutamine and mTOR play a key role in tumor growth and progression. Using both cellular and animal models, our results indicated that interfering with this connection through metabolic imbalance strongly affect the activation of autophagy in cancer cells, leading to a particular type of tumor cell death that we named “glutamoptosis”. During last years, my work was published in highly reputed scientific journals, such as Molecular Cell, Nature Communications, EMBO Reports, Autophagy, Nature Reviews Cancer, Cancer Research, Journal of Experimental and Clinical Cancer Research, Oncogene, Nucleic Acids Research, Molecular Oncology, among others.

Publications: 46 (Scopus), 22 as main author.

H-Index: 25 (Scopus)

Accumulated IF: 355 (average IF per publication: 8.5)

Total citations: 9730 (Scopus)

Supervision and mentoring: 8 postdocs; 6 PhD students; 6 Master students

## Part C. RELEVANT MERITS

### C.1. Publications (selected, last 10 years)

- Zarzuela L, López-Cepero IG, Rattigan KM, Sánchez-Escabias E, Morillo-Huesca M, Reina-Bando A, Oltra SS, Sierra-Párraga JM, Ceballos-Chávez M, Capilla-González V, Moreno-Bueno G, Murdoch PS, Reyes JC, Helgason VG, Tomé M, Durán RV. FGFR1 inhibition improves therapy efficacy and prevents metabolic adaptation associated with temozolomide resistance in glioblastoma, bioRxiv doi.org/10.1101/2025.01.11.632515.
- Rius-Pérez S, Mungai M, Paramo I, Coste J, Blanco J, Cano S, Junza A, Rodríguez-Nuevo A, Yanes O, Macías M, Llonch E, Aguilera M, Caballe-Mestres A, Durán RV, Palacin M, Nebreda A, Muñoz JP and Zorzano A. Mitofusin 2 modulates tumor growth through the asparagine synthetase/GABA shunt pathway, *under review in Nat Comms*.
- Morillo-Huesca M, López-Cepero IG, Conesa-Bakkali R, Tomé M, Watts C, Huertas P, Moreno-Bueno G, Durán RV, Martínez-Fábregas J (2025). Radiotherapy resistance driven by asparagine endopeptidase through ATR pathway modulation in breast cancer, **J Exp Clin Cancer Res** 44, 74. (IF 11.4).
- Olmedo-Moreno L, Panadero-Morón C, Sierra-Párraga JM, Bueno-Fernández R, Norton ES, Aguilera Y, Mellado-Damas N, García-Tárraga P, Morales-Gallel R, Durán RV, Ferrer-Lozano J, Escames G, García-Verdugo JM, Martín-Montalvo A, Guerrero-Cázares H, Capilla-González V (2025). Glioblastoma progression is hindered by melatonin-primed mesenchymal stromal cells through dynamic intracellular and extracellular reorganizations, **Theranostics** 15, 3076-3097 (IF = 12.4).
- Zarzuela L, Durán RV and Tomé M (2025) Metabolism and signaling crosstalk in glioblastoma progression and therapy resistance, **Mol Oncol** 19, 592-613 (IF = 6.6).
- García-Vilchez R, Añazco-Guenkova A, López J, Dietmann S, Tomé M, Jimeno S, Azkargorta M, Elortza F, Bárcena L, Gonzalez-Lopez M, Aransay A, Sánchez-Martín M, Huertas P, Durán RV and Blanco S (2023) N7-methylguanosine methylation of tRNAs regulates survival to stress in cancer, **Oncogene** 42, 3169-3181 (IF = 8.0).
- Bodineau C, Tomé M, Murdoch PDS and Durán RV (2022) Glutamine, mTOR and autophagy: a multiconnection relationship, **Autophagy** 18, 2749-2750 (IF = 13.3).
- Gómez-Marín E, Posavec-Marjanović M, Zarzuela L, Basurto-Cayuela L, Guerrero-Martínez J, Arribas G, Yerbes R, Ceballos-Chávez M, Rodríguez-Paredes M, Tomé M, Durán RV, Buschbeck M, Reyes JC (2022) The high mobility group protein HMG20A cooperates with the histone reader PHF14 to modulate TGF $\beta$  and Hippo pathways, **Nucleic Acids Research** 50, 9838-9857 (IF = 14.9).
- Kaminski H, Marseres G, Yared N, Nokin MJ, Hooks K, Pitard V, Tarricone A, Zouine A, Garrigue I, Loizon S, Capone M, Gauthereau X, Mamani-Matsuda M, Durán RV, Pinson B, Pellegrin I, Thiébaud R, Couzi L, Merville P and Déchanet-Merville J (2022) mTOR inhibitors prevent CMV infection through restoration of functional  $\alpha\beta$  and  $\gamma\delta$  T cells in kidney transplantation, **J Amer Soc Nephrol** 33, 121-137 (IF = 13.6).
- Bodineau C, Tomé M, Courtois S, Costa ASH, Richard E, Sciacovelli M, Vacher P, Bessede E, Varon C, Rousseau B, Soubeyran P, Frezza C, Murdoch PS, Villar VH and



- Durán RV (2021) Two parallel pathways connect glutamine metabolism and mTORC1 activity to regulate glutamoptosis, **Nat Comms** 12, 4814 (IF = 17.7).
- Courtois S, Haykal M, Bodineau C, Sifré E, Ménard A, Azzi-Martin L, Mégraud F, Lehours P, Durán RV, Varon C, and Bessède E (2021). Autophagy induced by Helicobacter pylori infection is necessary for gastric cancer stem cells emergence, **Gastric Cancer** 24, 133-144 (IF = 7.7).
  - Nguyen TL, Nokin MJ, Terés S, Tomé M, Galmar O, Pasquet JM, Rousseau B, van Liempd S, Falcon JM, Richard E, Muzotte E, Rezvani HR, Priault M, Bouchecareilh M, Redonnet-Vernhet I, Fuentes P, Calvo J, Uzan B, Pflumio F, Fuentes P, Toribio ML, Khatib AM, Mudoch PS, Soubeyran P and Durán RV (2021). Downregulation of Glutamine Synthetase, not glutaminolysis, is responsible for glutamine addiction in Notch1-driven acute lymphoblastic leukemia, **Mol Oncol** 15, 1412-1431 (IF = 7.5).
  - Soulet F, Bodineau C, Hoochs KB, Descarpentrie J, Alves I, Dubreuil M, Mouchard A, Eugenie M, Hoepffner JL, López J, Rosado JA, Soubeyran I, Tomé M, Durán RV, Nikolski M, Villoutreix BO, Evrard S, Siegfried G, Khatib AM (2020) ELA/APELA precursor cleaved by furin displays tumor suppressor function in renal cell carcinoma through mTORC1 activation, **JCI Insight** 5, e129070 (IF = 8.3).
  - Nguyen TL, Nokin MJ, Egorov M, Tomé M, Bodineau C, Di Primo C, Minder L, Wdzieczak-Bakala J, Garcia-Alvarez MC, Bignon J, Thoison O, Delpech B, Surpateanu G, Frapart YM, Peyrot F, Abbas K, Terés S, Evrard S, Khatib AM, Soubeyran P, Iorga B, Durán RV\* and Collin P (2018) mTOR inhibition via displacement of phosphatidic acid induces enhanced cytotoxicity specifically in cancer cells. **Cancer Res** 78, 5384-5397 (IF = 8.4) (\*, corresponding author).
  - Villar VH & Durán RV (2017) Glutamoptosis: a new cell death mechanism inhibited by autophagy during nutritional imbalance. **Autophagy** 13, 1078-1079 (IF = 11.1).
  - Villar VH, Nguyen TL, Delcroix V, Terés S, Bouchecareilh M, Salin B, Bodineau C, Vacher P, Priault M, Soubeyran P, Durán RV (2017) mTORC1 inhibition in cancer cells protects from glutaminolysis-mediated apoptosis during nutrient limitation. **Nat Comms** 8, 14124 (IF = 12.4).
  - Villar VH, Mehri F, Djavaheri-Mergny M and Durán RV (2015) Glutaminolysis and autophagy in cancer. **Autophagy** 11, 1198-1208 (IF = 9.11).

## C.2. Congress

- Co-organiser of a total of 10 international and national conferences.
- Invited to more than 20 conferences at international institutes, including Institute Gustave Roussy (Paris, France), MRC-Cancer Cell Unit (Cambridge, UK), Université de Lausanne (Switzerland), Institut Necker Enfants-Malades (Paris, France), among others.
- Contributed to ca. 100 international and national congresses and conferences.

## C.3. Research projects (selected, last 10 years)

**2025 - 2028:** Principal investigator of the project *New intervention oportunities in glioblastoma: immune signaling, metabolic reprogramming and autophagy resolution as therapeutic targets* (PID2024-156338OB-I00), funded by the Ministry of Science and Innovation of Spain (356250 EUR), CABIMER.

**2025:** Principal investigator of the project *Control metabólico y transcripcional durante la resistencia a tratamiento en glioblastoma* (2025AEP053), funded by the program *Ayudas extraordinarias para la preparación de proyectos* of the CSIC (20000 EUR), CABIMER.

**2022 - 2025:** Principal investigator of the project *Metabolic and transcriptional control during treatment resistance in glioblastoma multiforme* (PID2021-124251OB-I00), funded by the Ministry of Science and Innovation of Spain (290400 EUR), CABIMER.

**2022:** Principal investigator of the project *Desequilibrio metabólico y muerte celular en células tumorales de glioblastoma multiforme* (2021AEP005), funded by the program *Ayudas extraordinarias para la preparación de proyectos* of the CSIC (56600 EUR), CABIMER.

**2021 - 2023:** Principal investigator of the project *Hacia terapias personalizadas contra el glioblastoma: nuevas estrategias metabólicas y moleculares para interferir con la resistencia a tratamiento de las células madre tumorales* (PY20\_00757), funded by the Regional Government of Andalusia (60000 EUR), CABIMER.



**2019 - 2022:** Principal investigator of the project *Nutritional imbalance and cell death induction in cancer therapy: fundamental and translational aspects of glutamoptosis*, PGC2018-096244-B-I00, funded by the Ministry of Science, Innovation and Universities of Spain (205700 EUR), CABIMER (Spain).

**2016 - 2017:** Principal Investigator of the project *Role of AMPK and autophagy in mTOR-mediated cell death induction in cancer cells*, funded by the *Fondation ARC pour la Recherche sur le Cancer* (50000 EUR). IECB - U1218 (Bordeaux, France).

**2013 - 2017:** Principal Investigator of the project *Interaction entre la signalisation mTOR et le métabolisme de la glutamine dans les cellules cancéreuses*, funded by *CR Aquitaine* (220000 EUR), IECB - U1218 (Bordeaux, France).

**2013 - 2015:** Principal Investigator of the project *Crosstalk between cell growth signaling and metabolism in cancer cells*, Program *Amorçage de Jeunes Equipes* of the *Fondation pour la Recherche Médicale* (grant AJE201221, 300000 EUR), IECB - U916 (Bordeaux, France).

#### **C.4. Contracts, technological or transfer merits**

**2018:** Funding support (20000 EUR) by the *Ligue Contre le Cancer* (Bordeaux, France).

**2016:** Funding support (15000 EUR) by the *Ligue Contre le Cancer* (Bordeaux, France).

**2015:** Funding support (12500 EUR) by the *Ligue Contre le Cancer* (Bordeaux, France).

#### **C.5. Committee and network membership**

**2025 - present:** Associate evaluator (*gestor*) of the Spanish Agency of Investigation (AEI), in the Biomedicine – Cancer commission.

**2020 - 2024:** Deputy Director of CABIMER (Seville, Spain).

**2021 - 2025:** Member of the Executive Committee of Conexión-Cáncer, CSIC (Spain).

**2020:** Coordinator of the Challenge “CANCER” of the *Libro Blanco del CSIC*.

**2019 - 2024:** Member of the Direction Committee of CABIMER (Seville, Spain).

**2019 - 2022:** Director of the Department Cell Dynamics and Signaling at CABIMER (Spain).

**2016 - 2018:** Member of the Research Committee of Institut Bergonié (Bordeaux, France).

#### **C.6. International and national teaching**

**2020 - present:** External Professor of the PhD Program in Biotechnology and Chemical Technology and Engineering of the Universidad Pablo de Olavide (Seville, Spain).

**2014 - present:** Invited Professor at University of Bordeaux, France, participating in the Master in Cancer Biology, under the subject Cancer Metabolism/Biosynthetic Pathways.

**2016 - 2020:** University of the Basque Country, University of Cantabria, CSIC, and CIC-Biogune (Bilbao, Spain), participation in the Master in Molecular Biology and Biomedicine, under the subject Workshop in Molecular Biology.

**2010 - 2013:** Department of Biochemistry (University of Basel, Switzerland), participation in the Degree in Biochemistry under the subject Biochemistry as lab practice coordinator.

**2002 - 2005:** Department of Plant Biochemistry and Molecular Biology (University of Seville, Spain), participation in the Degree in Biology under the subjects Experimental Techniques on Biochemistry, Structure of Macromolecules and Biochemistry.

#### **C.7. Other international activity**

- Member of evaluation panels for the following international institutions: Wellcome Trust Foundation (UK); Canceropole PACA (France); Biotechnology and Biological Sciences Research Council (UK); Université Sorbonne Paris Cité (France); Kidney Research UK (UK); Wellcome Trust/DBT India Alliance (UK / India); University of Luxembourg (Luxemburg); Fondation Canadienne pour l'innovation (Canada).

- Associate Editor of *Cancer & Metabolism*. *Ad hoc* reviewer for international scientific journals, such as *Nat. Metab.*, *Nat. Cell. Biol.*, *Nat. Commun.*, *EMBO Mol. Med.*, *J. Cell Biol.*, *Cell Death and Diff.*, *Oncogene*, *Autophagy*, *PLoS Genet.*, *Mol Oncol*, among others.

- Affiliated to the following societies: European Association for Cancer Research (EACR), Federation of European Biochemical Societies (FEBS), Club Française de l'Autophagie (France), SEBBM, SFBC, ASEICA, Biochemical Society UK.