Fecha del CVA	28/01/2025

Parte A. DATOS PERSONALES

Nombre	GUILLERMO		
Apellidos	LOPEZ LLUCH		
Sexo	No Contesta	Fecha de Nacimiento	
DNI/NIE/Pasaporte			
URL Web	http://www.cabd.es/es-research_groups-54-139-envejecimiento-metabolismo-y-sistemas-antioxidantes-resumen.html		
Dirección Email	glopllu@upo.es		
Open Researcher and Contributor ID (ORCID)	0000-0001-9830-8502		

A.1. Situación profesional actual

Puesto	Catedrático de Universidad		
Fecha inicio	2018		
Organismo / Institución	Universidad Pablo de Olavide		
Departamento / Centro			
País		Teléfono	
Palabras clave	240700 - Biología celular		

A.3. Formación académica

Grado/Master/Tesis	Universidad / País	Año
DOCTOR EN CIENCIAS BIOLÓGICAS BIOLOGÍA FUNDAMENTAL	UNIVERSIDAD DE CÓRDOBA. BIOLOGIA CELULAR, FISIOLOGÍA E INMUNOLOGÍA	1997

Parte B. RESUMEN DEL CV

During the last years my scientific research has been focussed on the role of metabolism, mitochondria and antioxidant systems in aging, metabolic diseases and their relationship with the progression of age-related diseases. In relationship with this experience, I have published most of my scientific papers in high impact journals in the field of metabolism and in gerontology and geriatrics. I have published a total 127(WOS) or 132(Scopus) indexed publications with more than 8300 citations to date accordingly with both platforms. The current h index is 34 for WOS and 36 for Scopus; and the I10 index is 80 in both cases. The average of cites per item is 65.2 (WOS). All this production has been recognized in 5 research "sexenios", last one at 31/12/2022.

Regarding lidership I have directed different projects on the role of physical exercise and nutritional interventions such as caloric restriction or nutraceuticals such as resveratrol on their impact in metabolism, mitochondria and antioxidant systems and their influence in aging and rare diseases. Into this field, I have been the PI of several grants funded by the Spanish Government: DEP2005-00238-C04-04/EQUI, DEP2009-12019, DEP2012-39985; and other granted by the Andalusian Government: IMD2010SC0002 and UPO-1259581 UPO-FEDER just finished. I have also particiated in a project in collaboration with Jon J. Ramsey at the California University at Los Angeles and the Universidad de Córdoba funded by the National Institutes of Aging of USA: 1R01AG028125-01A1. Currently I am carrying out a small project granted by the Pablo de Olavide University to find biomarkers of mitochondrial dysfunction during aging in relationship with cognitive dysfunction and waiting for the decision of the Spanish Government and also the Junta de Andalucía in relationship with two projects submitted for evaluation. Further, recently we have granted with a EC grant into the CBE-JU call (Home | Circular Bio-based Europe Joint Undertaking (CBE JU) (europa.eu)) program in which I am the IP of the UPO group.

Research has been published in jounals in the top ranking of Geriatrics and Gerontology such as Aging Cell, J. Gerontol A Biol Sci, Exp Gerontol, Biogerontology, AGE, and also in miscelaneous journals such as Proc Natl Acad Sci; Nature or specialized in the field of the

biochemistry such as J Biol Chem, Biochem J or Front Physiology among others. Further, I have published several book chapters and edited two books in the field of CoQ10 and health and mitochondria

A total of 5 doctorate thesis have been carried out about the subject of aging and modulating factors and the last 3 thesis during the last 10 years. All of them have received the highest qualification as the rest of thesis in which I have participated (7 in total). Currently I am the director or codirector of 3 doctorate, one of them will be defended in February-March.

The research also includes more than 130 congress communications including invited and oral conferences. Currently I am Academic Editor of Plos One, Biogerontology and J. of Gerontology and invited editor in Frontiers in Physiology and in Antioxidants. I am also member of several scientific societies: SFFR-E, SEBC, SEBBM, SEG and and also the President of the International Coenzyme Q10 Association, a scientific association involved in the dissemination of the studies focussed on the role of CoQ10 in basic and applied science and health.

Parte C. LISTADO DE APORTACIONES MÁS RELEVANTES

C.1. Publicaciones más importantes en libros y revistas con "peer review" y conferencias

AC: Autor de correspondencia; (nº x / nº y): posición firma solicitante / total autores. Si aplica, indique el número de citaciones

1 **Artículo científico**. Moreno-Fernandez-Ayala, Daniel Jose; Jiménez-Gancedo, Sandra; GUERRA-PÉREZ, IGNACIO; et al; Navas-Lloret, Placido. 2025. MODELLING THE HUMAN COENZYME Q DEFICIENCY IN DROSOPHILA MELANOGASTER. Free Radical Biology & Medicine. pp.1-17. ISSN 0891-5849.

2 **Artículo científico**. MA VARGAS-LOPEZ; DAMIEN P. DEVOS; G LOPEZ-LLUCH. 2024. An AlphaFold Structure Analysis of COQ2 as Key a Component of the Coenzyme Q Synthesis Complex. ANTIOXIDANTS. MDPI. 13-4, pp.496.

3 **Artículo científico**. MARIA ALCÁZAR-FABRA; ABRAHAM J PAREDES-FUENTES; MANUEL TORRALBA CARNERERO; et al; CARLOS SANTOS-OCAÑA. 2024. NEW VARIANTS EXPAND THE NEUROLOGICAL PHENOTYPE OF COQ7 DEFICIENCY. J INHERIT METAB DIS. WILEY.

4 **Artículo científico**. DANIEL J. MORENO FERNÁNDEZ-AYALA; JUAN DIEGO HERNÁNDEZ-CAMACHO; CRISTINA VICENTE-GARCÍA; et al; PLACIDO NAVAS. 2024. Prenatal and progressive coenzyme Q10 administration to mitigate muscle dysfunction in mitochondrial disease. J Cachexia Sarcopenia Muscle. WILEY.

5 **Artículo científico**. AITOR GONZAGA; ETELVINA ANDREU; LUIS M. HERNÁNDEZ-BLASCO; et al; BERNAT SORIA. 2023. Rationale for combined therapies in severe-to-critical COVID-19 patients. Frontiers in Immunology. Frontiers. 14-1232472, pp.1-18.

6 **Artículo científico**. Fernandez-Portero, Cristina; García-Amián, Josue; De La Bella-garzón, Rocío; Lopez-Lluch, Guillermo; Alarcón-Rubio, David. 2023. COENZYME Q10 LEVELS ASSOCIATED TO COGNITIVE FUNCTIONING AND EXECUTIVE FUNCTION IN OLDER ADULTS. The Journals of Gerontology. Series A: Biological Sciences & Medical Sciences. 78-1, pp.1-8. ISSN 1758-535X.

7 **Artículo científico**. Mantle, David; Lopez-Lluch, Guillermo; Hargreaves, Iain Parry. 2023. COENZYME Q10 METABOLISM: A REVIEW OF UNRESOLVED ISSUES. International Journal of Molecular Sciences. 24-2585, pp.1-13. ISSN 1661-6596.

8 **Artículo científico**. Hernández, Juan Diego; Moreno-Fernandez-Ayala, Daniel Jose; Vicente García, Cristina; et al; Navas-Lloret, Placido. 2022. CALORIE RESTRICTION RESCUES MITOCHONDRIAL DYSFUNCTION IN ADCK2-DEFICIENT SKELETAL MUSCLE. Frontiers in Physiology. 13-898792, pp.1-20. ISSN 1664-042X.

9 **Artículo científico**. Fernandez-Portero, Cristina; García-Amián, Josue; De La Bella-garzón, Rocío; Lopez-Lluch, Guillermo; Alarcón-Rubio, David. 2022. COENZYME Q10 LEVELS ASSOCIATED TO COGNITIVE FUNCTIONING AND EXECUTIVE FUNCTION IN OLDER ADULTS. The Journals of Gerontology. Series A: Biological Sciences & Medical Sciences. X, pp.1. ISSN 1758-535X.

10 **Artículo científico**. De La Bella-garzón, Rocío; Fernandez-Portero, Cristina; Alarcón-Rubio, David; García-Amián, Josue; Lopez-Lluch, Guillermo. 2022. LEVELS OF PLASMA COENZYME Q10 ARE ASSOCIATED WITH PHYSICAL CAPACITY AND CARDIOVASCULAR RISK IN THE ELDERLY. Antioxidants. 11-279, pp.279-1-279-17. ISSN 2076-3921.

11 **Artículo científico**. Beá, Aida; García-valero, Juan; Irazoki, Andrés; et al; Sanchís, Daniel. 2021. CARDIAC FIBROBLASTS DISPLAY ENDURANCE TO ISCHEMIA, HIGH ROS CONTROL AND ELEVATED RESPIRATION BY THE JAK2/STAT PATHWAY. The FEBS Journal. xx, pp.1-46. ISSN 1742-4658.

12 **Artículo científico**. Hernández, Juan Diego; García-Corzo, Laura; Moreno-Fernandez-Ayala, Daniel Jose; Navas-Lloret, Placido; Lopez-Lluch, Guillermo. 2021. COENZYME Q AT THE HINGE OF HEALTH AND METABOLIC DISEASES. Antioxidants. 10-1785, pp.1-25. ISSN 2076-3921.

13 **Artículo científico**. Lopez-Lluch, Guillermo. 2021. COENZYME Q HOMEOSTASIS IN AGING: RESPONSE TO NON-GENETIC INTERVENTIONS. Free Radical Biology & Medicine. 164-2021, pp.285-302. ISSN 0891-5849.

14 **Artículo científico**. Lopez-Lluch, Guillermo. 2021. COENZYME Q HOMEOSTASIS IN AGING: RESPONSE TO NON-GENETIC INTERVENTIONS. Free Radical Biology & Medicine. 164-2021, pp.285-302.

15 **Artículo científico**. Navas-Lloret, Placido; Cascajo-Almenara, Maria Victoria; Alcázar-Fabra, María; et al; Santos-Ocaña, Carlos. 2021. SECONDARY COQ10 DEFICIENCY, BIOENERGETICS UNBALANCE IN DISEASE AND AGING. BioFactors. 47, pp.551-569. ISSN 1872-8081.

16 **Artículo científico**. Sánchez-Cuesta, Ana María; Cortés, Ana; Navas-enamorado, Ignacio; Lekue, José Antonio; Viar, Toscana; Axpe, Martín; Navas-Lloret, Placido; Lopez-Lluch, Guillermo. 2020. HIGH COENZYME Q10 PLASMA LEVELS IMPROVE STRESS AND DAMAGE MARKERS IN PROFESSIONAL SOCCER PLAYERS DURING COMPETITION. International Journal for Vitamin and Nutrition Research. pp.1-12.

17 **Capítulo de libro**. Lopez-Lluch, Guillermo. 2024. AGING AND BIOENERGETICS OF MITOCHONDRIA. TRANSLATIONAL MITOCHONDRIAL MEDICINE. pp.285-303.

18 **Capítulo de libro**. JUAN DIEGO HERNÁNDEZ-CAMACHO; GUILLERMO. 2024. COQ10, MORE THAN AN ANTIOXIDANT IN SKIN HEALTH AND WOUND HEALING PROMOTION. ADVANCES IN BIOGERONTOLOGY, REDOX SIGNALING IN WOUND HEALING IN ELDERLY POPULATIONS: TEORETICAL BASIS, PART 1. ACADEMIC PRESS. 2, pp.203-218.

19 **Capítulo de libro**. Gvozdjáková, Anna; Navas-Lloret, Placido; Lopez-Lluch, Guillermo. 2024. TARGETED SUPPORTIVE THERAPY WITH COENZYME Q10 IN CLINICAL PRACTICE. TRANSLATIONAL MITOCHONDRIAL MEDICINE. pp.307-317.

20 **Capítulo de libro**. Lopez-Lluch, Guillermo. 2023. COENZYME Q AS AN ANTIAGING STRATEGY. EMERGING ANTI-AGING STRATEGIES. pp.17-39.

21 **Capítulo de libro**. Lopez-Lluch, Guillermo. 2023. COENZYME Q-RELATED COMPOUNDS TO MAINTAIN HEALTHY MITOCHONDRIA DURING AGING. ADVANCES IN PROTEIN CHEMISTRY AND STRUCTURAL BIOLOGY. pp.1-32.

22 **Capítulo de libro**. Lopez-Lluch, Guillermo. 2023. MITOCHONDRIA-TARGETED ANTIOXIDANTS: COENZYME Q10, MITO-Q AND BEYOND. MOLECULAR NUTRITION AND MITOCHONDRIA. pp.255-302.

23 **Capítulo de libro**. Lopez-Lluch, Guillermo. 2022. IMPORTANCE OF COQ10-DEPENDENT REDOX ACTIVITY IN AGING. REDOX SIGNALING AND BIOMARKERS IN AGING. pp.185-208.

24 **Capítulo de libro**. Lopez-Lluch, Guillermo; Navas-Lloret, Placido. 2020. COENZYME Q10 SUPPLEMENTATION IN AGING. AGING: OXIDATIVE STRESS AND DIETARY ANTIOXIDANTS. pp.183-192.

25 **Libro o monografía científica**. Lopez-Lluch, Guillermo. 2020. COENZYME Q IN AGING. COENZYME Q IN AGING. Springer. ISBN 978-3-030-45641-2.

C.3. Proyectos o líneas de investigación

1 **Proyecto**. BÚSQUEDA DE BIOMARCADORES DE DEFICIENCIA COGNITIVA TEMPRANA. GUILLERMO LOPEZ LLUCH. (Universidad Pablo de Olavide). 29/02/2024-31/12/2024. 6.000 €.
2 **Proyecto**. PI20/00541, Diagnóstico molecular de los defectos de la fosforilación oxidativa mitocondrial: patogénesis de las deficiencias de CoQ10. (INSTITUTO DE SALUD CARLOS III). Desde 01/01/2021. 124.630 €.
3 **Proyecto**. PID2019-110587RB-100, MODULACIÓN DEL COMPLEJO MITOCONDRIAL II HEPÁTICO Y SU IMPACTO EN FISIOPATOLOGÍA HEPÁTICA Y METABOLISMO. OPORTUNIDADES DIAGNÓSTICAS Y TERAPÉUTICAS. : MINISTERIO DE CIENCIA E INNOVACIÓN. Desde 01/06/2020. 157.300 €.
4 **Proyecto**. UPO-1259581, ESTUDIO DE LA INFLUENCIA DE LA ACTIVIDAD FÍSICA EN LA SALUD Y LA CAPACIDAD COGNITIVA DURANTE EL ENVEJECIMIENTO. UNIVERSIDAD PABLO DE OLAVIDE - JUNTA DE ANDALUCÍA. Desde 01/01/2020. 34.583 €.
5 **Proyecto**. P18-RT-4775, LIVER MITOCHONDRIAL COMPLEX II: IMPACT ON LIVER PATHOPHYSIOLOGY AND METABOLISM LOOKING FOR THERAPEUTIC OPPORTUNITIES. Consejería de Economía, Conocimiento, Empresas y Universidad, Consejería de Economía, Conocimiento, Empresas y Universidad, Dirección General de Investigación y Transferencia del Conocimiento. Desde 01/01/2020. 140.352 €.
6 **Proyecto**. EQC2018-004429-P, Avances en el estudio de la composición corporal y condición cardiorespiratoria en múltiples poblaciones. GUILLERMO LOPEZ LLUCH. (Ministerio de Economía y Competitividad y Ministerio de Ciencia, Innovación y Universidades.). Desde 14/06/2018. 138.350 €.
7 **Proyecto**. BFU2016-79173-R, ESTUDIO DEL EFECTO DE LA ACTIVIDAD FÍSICA SOBRE LA SALUD EN EL ENVEJECIMIENTO. Consejería de Economía y Conocimiento de la Junta de Andalucía. GUILLERMO LOPEZ LLUCH. Desde 02/11/2017. 7.000 €.
8 **Proyecto**. DEP2012-39985, REGULACIÓN DE LAS RESPUESTAS ANTIOXIDANTE Y METABOLICA INDUCIDAS POR EL EJERCICIO, LA DIETA Y/O RESVERATROL. GUILLERMO LOPEZ LLUCH. Desde 01/01/2013. 80.000 €.
9 **Contrato**. DETERMINATION OF BIOAVAILABILITY ANALYSES OF UBIQUINONE FORMULATIONS 28/10/2020-27/10/2021. 36.000 €.
10 **Contrato**. STUDY OF BIOAVAILABILITY OF THREE DIFFERENT UBIQUINOL/UBIQUINONE FORMULATIONS 28/10/2020-27/10/2021. 25.827,5 €.
11 **Contrato**. ANÁLISIS DE BIODISPONIBILIDAD DE UBIQUINONA EN TRES FÁRMACOS EN HUMANOS JÓVENES Y SALUDABLES PLACIDO NAVAS LLORET. 18/10/2016-18/10/2017. 18.414 €.
12 **Contrato**. ANÁLISIS DE LAS TASAS DE BIODISPONIBILIDAD DE UBIQUINONA EN SEIS FÁRMACOS EN HUMANOS JÓVENES Y SALUDABLES PLACIDO NAVAS LLORET. 16/02/2015-16/02/2016. 30.995 €.