CURRICULUM VITAE ABREVIADO (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

First name	Ana Isabel		
Family name	Lloret Alcañiz		
Gender (*)	Woman	Birth date (dd/mm/yyyy)	
Social Security, Passport, ID number			
e-mail		URL Web	
Open Researcher and Contributor ID (ORCID) (*)		0000-0003-0266-0304	

(*) Mandatory

A.1. Current position

Position	Professor		
Initial date	October 2022		
Institution	University of Valencia		
Department/Center	Physiology		
Country	Spain	Teleph. number	
Key words	Alzheimer Disease, hippocampal commissure, demyelination, memory		

A.2. Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
1997-2000	FPI fellowship Education Science Ministry. Dpt. Physiology. University of Valencia
2000-2001	Research Technician
2001-2002	Profesora Asociada
2002-2003	Senior Research Technician
2003-2004	Posdoctoral Fellowship
2004-2007	Prof. Ayudante Doctor
20104-2010	Pro. Contratado Doctor
2010-2022	Profesora titular

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Medical Education	Universitat de Barcelona	2009
Doctor in Biology	Universitat de València	2002
Bachelors in biology	Universitat de València	1995

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

I have a degree in Biological Sciences, specializing in Biochemistry, and a PhD. In Biology from the University of Valencia (June 2002). I started my scientific career as FPI Fellow of the Ministry of Education and Science in 1997, after which I worked as Research Technician, Senior Research Technician and Postdoctoral Fellow. After a competitive examination, I obtained the position of Professor *Ayudante Doctor* in 2004, and after a competitive examination I obtained the position of *Contratado Doctor* in 2007, and in 2010 I obtained my position as Full Professor at the Department of Physiology of the Faculty of Medicine of Valencia and finally, the professor position in 2022. I have published a total of 74 articles, 68 international papers in JCR, 40 in Q1. I have been cited a total of 5094 times (average number of citations/papers 74.91). My H-index is 35. I have 6 publications in national quality journals and 10 chapters book, one of them international. I have presented 159 communications to

congresses, 106 of them international, and 38 conferences and seminars. I am an editor of the following scientific journals: Frontiers in Neurology, Frontiers in aging Neuroscience, International Journal of Molecular Science, and Oxidative Medicine and Cellular Longevity. Reviewer of articles for 49 international journals: Journal of Alzheimer Disease, Free Radical Research, Revista Española de Neurología, Free Radical Biology and Medicine, PlosOne, Cell Death and Disease, Cell Death and Differentiation, International Journal of Molecular Science, Oxidative Medicine and Cellular Longevity, PlosOne, Frontiers in Neurology, Alzheimer's Disease and Therapy, Alzheimer's and Dementia and Frontiers in Immunology.
I have reviewed 5 international projects for the next institutions: Sapienza University of Rome, Italy (2016). ERC Advanced Grants from the European Research Council (2022), ETH Zurich University (2021), University of Liverpool (2021), Fondo para la Investigación Científica y Tecnológica (FONCyT) of the Republic of Argentina (2022). I am a member of the panel of expert project evaluators of the community of Castilla y León.
I have reviewed several Spanish and 2 international doctoral theses: from Vivesvaraya Technological in Karnataka State (India) and from the Universita de la Sapienza in Rome.
I have supervised 8 doctoral theses, all with the qualification of 'Cum Laude' and three with the European Mention. One of them, that of Dr. Mari Carmen Badía, received the FUNDACIÓN 3M Award (December 2006) to the most innovative idea in the field of Biomedicine.
I have participated in 29 public research projects, 21 national projects as collaborator, 2 European projects and I have been principal investigator of 6 projects.
I belonged to the network for the study of Rare Diseases (CIBERER), to the RETICEF network for the study of ageing and associated diseases such as fragility and Alzheimer's disease and currently I belong to the CIBERFES for the study of fragility. I have organized 2 congresses, one national and one international. I have visited several foreign laboratories: Prof. Bruce Ames in Berkeley (USA), Prof. Weindruch's laboratory, Wisconsin (USA), Prof Brunk, Linshoping (Sweden) and that of Professors Stephen Loft and Henrik Poulsen in Copenhagen (Denmark), Prof Marzia Perluigi (La Sapienza, Roma). My line of research has always focused on the Physiopathology of Alzheimer's Disease, since I started in 1997.

Part C. RELEVANT MERITS *(sorted by typology)*

C.1. Publications *(see instructions)*

- Ferré-González, L; Balaguer, A; Roca, M et al. 2024. Plasma lipidomics in early APP/PS1 female mouse model and its relationship with brain: Is it affected by the estrous cycle? Alzheimer's Research & Therapy 16(1) (5/6). This recent article is directly related to our research project. It is published in a very relevant journal in the field. We have linked abnormal plasma lipid levels in Alzheimer's transgenic animals to lipid levels in brain. In addition, all the work is done in female mice, and we have related it to the estrous cycle, so it has an important gender perspective.
- Nepomuceno, M; Monllor, P; Cardells, MJ et al. 2024. Redox-associated changes in healthy individuals at risk of Alzheimer's disease. A ten-year follow-up study. Free Radical Biology and Medicine 215, pp. 56-63 (9/9, corresponding author). I have selected this paper because it is a 10-year follow-up of a cohort of young, healthy people at risk for Alzheimer's disease. We found a shift from having reductive stress to oxidative stress, which may indicate how the disease evolves in the years prior to memory loss.
- Esteve, D; Molina-Navarro, MM; Giraldo E; et al. 2022. Adult Neural Stem Cell Migration Is Impaired in a Mouse Model of Alzheimer's Disease. Molecular Neurobiology 59 (2), pp.1168-1182. (9/9, corresponding author). This work is the basis of an objective in this project, which is the migration of oligodendrocytes into the hippocampal commissure from the SVZ. It is central to my current line of research. The first author is doing his postdoctoral fellowship at the University of Wisconsin.
- Villafranca-Faus, M; Vila-Martín, ME; Esteve, D. et al. 2021. Integrating pheromonal and spatial information in the amygdalo-hippocampal network. Nature Communication.12 (1). (8/10). I select this work because of the great relevance of the journal where it is published. It deals with new mechanisms and pathways of neuronal communication in memory.
- Fuchsberger, T; Yuste, R; Martinez-Bellver, S et al. 2019. Oral Monosodium Glutamate Administration Causes Early Onset of Alzheimer's Disease-Like Pathophysiology in APP/PS1 Mice. Journal of Alzheimer's Disease. 72 (3), pp.957-975. Thanks to this work we opened the

line of research on the role of excess glutamate in Alzheimer's disease. It is directly related to the objectives of this project.
- Cenini, G; Lloret, A and Cascella, R. 2019. Oxidative Stress in Neurodegenerative Diseases: From a Mitochondrial Point of View. Oxidative Medicine and Cellular Longevity. 2105607. (2/3, co-first author). I highlight this review because of the great international impact it has had. So far it has a total of 335 citations.
- Fuchsberger, T; Martínez-Bellver, S; Giraldo E et al. 2016. Aβ Induces Excitotoxicity Mediated by APC/C-Cdh1 Depletion That Can Be Prevented by Glutaminase Inhibition Promoting Neuronal Survival. Scientific Report 6; 31158 (5/6, corresponding author). This work is the basis of the line of research that I have followed in my research career. It contains the results of the thesis of Tanja Fuchsberger, of whom I was the director, and who now has her own research group at the University of Cambridge.
- Lloret, A; Badia, MC; Giraldo, E et al. 2011. Amyloid-β Toxicity and Tau Hyperphosphorylation are Linked Via RCAN1 in Alzheimer's Disease Journal of Alzheimer's Disease. 27 (4), pp.701-709. This publication is part of my postdoc research. It has had a great international impact, with 123 total citations.
- Badia, MC; Lloret, A; Giraldo E; et al. 2013. Lymphocytes from Young Healthy Persons Carrying the ApoE4 Allele Overexpress Stress-Related Proteins Involved in the Pathophysiology of Alzheimer's Disease. Journal of Alzheimer's Disease 33 (1), pp.77-83. (2/7). The results contained in this article were part of Dr. Badia's thesis that I directed. For them we were awarded the 3M prize for the most innovative idea in biomedicine.
- Lloret, A; Badía, MC, Mora NJ; et al. 2009. Vitamin E Paradox in Alzheimer's Disease: It Does Not Prevent Loss of Cognition and May Even Be Detrimental. Journal of Alzheimer's Disease. 17 (1), pp.143-149 (1/6). I have selected this publication because it is the article where we published the results of my doctoral thesis. It has had a great international impact, with 187 total citations.

C.2. Congress, indicating the modality of their participation (invited conference, oral presentation, poster)
- Title: A new function for an old cell-cycle enzyme: role in Alzheimer's disease Place: Universidad La Sapienza Roma Country: ITALY Date: 20/04/2018 Name of the event: Inaugural lecture of the academic year. Author: Ana Lloret
- Title: Neural migration is impaired in the APP/PS1 Alzheimer's mice model Place: Univ. Unipampa en Uruguaiana Country: BRAZIL Date: 01/11/2021 Name of the event: Curso de Neurociência Aplicada à Educação Author: Ana Lloret
- Title: Role of APC/C in Alzheimer's disease Place: INCLIVA. Valencia Country: SPAIN Date: 06/06/2022 Name of the event: Invitation of AARON CIECHANOVER - PREMIO NOBEL QUÍMICA 2004 by INCLIVA. Author: Ana Lloret
- Authors: Paloma Monllor; Begoña López-Pesquera; Artemis Ftara; Ana Lloret.Title: Lymphocyte's proliferation is impaired in Alzheimer's disease subjects. Type of participation: Poster Conference: 11th IBRO World Congress of Neuroscience National / International: International City: Granada Country:: SPAIN Year: 2023
- Authors: Artemis Ftara; Rut Campos; María-Ángeles Lloret; José Luís León; Natalia Castillo; Begoña López; Ana Cervera-Ferri; Ana Lloret.Title: Hippocampal Commisure Demyelination Associated To Early Alzheimer's Disease Type of participation: Poster Conference: 11th IBRO World Congress of Neuroscience. National / International: International City: Granada Country: SPAIN Year: 2023.
-Authors: Mariana Nepomuceno; Paloma Monllor; Daniel Esteve; Jose Viña; Ana Lloret. Title: Apolipoprotein E4 and Oxidative Stress: a prospective study Type of participation: Communication Conference: SFRR International 2021 Meeting Publication: FRBM 165, S1 Pg 58. National / International: International Country: SPAIN Year: 2022
- Authors: Artemis Ftara, Rut Campos, Jose Luis León, Maria-Angeles Lloret, Natalia Castillo, Begoña López, Ana Cervera-Ferri and Ana Lloret. Title: Fornix demyelination in the early onset of Alzheimer's disease Type of participation: Poster Conference: XL Congress Of the Spanish and Portuguese Society of Physiological Sciences. Badajoz 19-22 September 2022. National / International: International City: Country: SPAIN Year: 2022
- Authors: Daniel Esteve; Paloma Monllor; Jose Manuel García-Verdugo; José Viña, and Ana Lloret. Title: Migrating SVZ-cells are in a senescence state in the Alzheimer's mouse model

APP/PS1 Type of participation: Poster Conference: FENS Forum 2020 National / International: International City: Glasgow Country: UNITED KINGDOM Year: 2020
- Authors: María Villafranca-Faus; Manuel E. Vila-Martín; Anna Teruel-Sanchis; Esteban Merino; Daniel Esteve; Sergio Martínez-Bellver; Ana Cervera-Ferri; Joana Martínez-Ricós; Ana Lloret; Vicent Teruel-Martí; Enrique Lanuza Title: Vomeronasal-related learning in the amygdalo-hippocampal network Type of participation: Communication
Conference: VIII Olfactory Meeting Number or authors: 11 National / International: International Organizer Entity: Red Olfativa Española City: La Franca Country: SPAIN Year: 2022
- Authors: Anna Teruel-Sanchis; María Villafranca-Faus; Manuel E. Vila-Martín; Daniel Esteve; Esteban Merino; Ana Cervera-Ferri; Joana Martínez-Ricós; Ana Lloret; Vicent Teruel-Martí; Enrique Lanuza Title: Evaluation of exploratory behavior in anosmic mice with deeplabcut, a deep learning-based open-source software Type of participation: Communication Conference: VIII Olfactory Meeting Number or authors: 10 National / International: International Organizer Entity: Red Olfativa Española City: La Franca Country:: SPAIN Year: 2022

C.3. Research projects.

- Title of the project / contract: Desmielinización inter-hipocámpica en el inicio temprano de la enfermedad de Alzheimer: estrategias de remielinización. Type of contract/Program: Accions especials de la Universitat de València Financing Firm/administration: Vicerrectorat d'Investigació – UV Ref: UV-INV-AE-1546096. 2021-2022. PI: Ana Lloret Alcañiz
- Title of the project / contract: Desmielinización interhipocámpica en el inicio temprano de la enfermedad de Alzheimer. Financing Firm/administration: Ministerio de Ciencia e Innovación Institutions participating: Unión Europea / Agencia Estatal de Investigación.
Number of the project / contract: PID2021-127236OB-I00 Amount: 121.000,00 Duration, since: 2022- 2025. PI: Ana Lloret Alcañiz y Ana Cervera Ferri.
- Title of the project / contract: Estudio de la fragilidad cognitiva y su transicion a la demencia mediante un conjunto de biomarcadores en sangre periferica. Intervencion con genisteina. Financing Firm/administration: CSIC Number of the project / contract: 0348_CIE_6_E. 2018-2019. PI: Jose Viña Ribes
- Title of the project / contract: Papel de la calcineurina y de su regulador RCAN en la respuesta cerebral al estrés oxidativo y la apoptosis: estudio en ratones RCAN KO. Financing Firm/administration: Fundacion Investigación Hospital Clinic de Valencia. Instituto de Investigación Sanitaria INCLIVA. Universidad de Valencia. 2014-2015. PI: Ana Lloret Alcañiz.
- Title of the project / contract: Papel de APC-C/Cdh1 en la Enfermedad de Alzheimer: bases moleculares y búsqueda de nuevos biomarcadores Financing Firm/administration: Generalitat Valencian. Ref: AICO/2016/078. 2016-2017. PI: Ana Lloret.
- Title of the project / contract: "Papel de los radicales libres en la biología de las células madre. Importancia en el desarrollo del envejecimiento" Financing Firm/administration: Programa Prometeo (I+D) para grupos de investigación de excelencia. Ref: 2010/074. 2011-2012. PI: Jose Viña Ribes.
-Title of the project / contract: Regulación epigenética de la proliferación celular por el glutatión nuclear. Financing Firm/administration: Ministerio de Ciencia y Tecnología. Ref: SAF2008-01338. 2009-2011. PI: Federico V. Pallardó Calatayud.
-Title of the project / contract: Estudio de la toxicidad intracelular del péptido beta-amiloide: relación con el estrés oxidativo y la apoptosis'. Financing Firm/administration: Conselleria de Cultura, Educación y Deporte. Generalitat Valenciana Number. Ref: GV2004-A-112. 2004-2006. PI: Ana Lloret Alcañiz.
-Title of the project / contract: Papel de los radicales libres en el envejecimiento y enfermedades asociadas, en especial la enfermedad de Alzheimer y la sarcopenia senil. prevención mediante la inducción de genes antioxidantes. Financing Firm/administration: Ministerio de Ciencia y Tecnología. Ref: SAF04-3257. 2003-2006. PI: Jose Viña Ribes
-Title of the project / contract: "Envejecimiento y radicales libres. Regulación de la expresión de distintos genes antioxidantes por estrógenos y por componentes de la dieta." Financing Firm/administration: Ministerio de Ciencia y Tecnología. Ref: BFI-2001-2849. 2001-2003. PI: Jose Viña Ribes.