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	Gabriela		
Family name	Llosá Llácer		
Gender (*)	Female	Birth date (dd/mm/yyyy)	08/01/1975
Social Security, Passport, ID number	52477797P		
e-mail	Gabriela.llosa@ific.uv.es	URL Web	
Open Researcher and Contributor ID (ORCID) (*)		0000-0002-0364-8158	

(*) Mandatory

A.1. Current position

Position	Investigadora Científica CSIC		
Initial date	18/10/2023		
Institution	C onsejo Superior de Investigaciones Científicas (CSIC)		
Department/Center	Instituto de Física Corpuscular		
Country	Spain	Teleph. number	963543849
Key words	Medical physics, hadron therapy, PET, detectors, SiPMs.		

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

Period	Position/Institution/Country/Interruption cause
2021-2023	Científica Titular CSIC
2014-2021	Ramón y Cajal/IFIC/Spain/ 84 months
2009-2014	Juan de la Cierva+JAE postdoc/ IFIC/Spain/ 60+4 m maternal leave
2007-2009	Marie Curie Fellowship/Univ. Of Pisa/Italy/ 24 months
2006-2007	INFN fellowship/INFN Pisa/Italy/ 12 months (No renewal)
2000-2007	Bancaixa+FPI fellowships/IFIC/Spain/ 54 months

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD in Physics	University of Valencia	2005
Advanced Studies Degree	University of Valencia	2001
Master in Physics	University of Valencia	1998

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

Dr. Gabriela Llosá has been the coordinator of the IRIS group at IFIC-Valencia (http://ific.uv.es/iris) since 2014. She is currently the coordinator of the European project (AIDER), the local PI of the European project IMMPRINT and the P.I. of a National Spanish project. She is also the president of the Medical Physics group of the Spanish Royal Physics Society since 2019 and previously the secretary since 2014.

She has more than twenty years experience in detector development, mainly for medical applications. She is well known in the field both nationally and internationally. She started working in the construction of detectors for different particle physics experiments and she specialized in detectors for medical imaging. She has always worked in the development of

novel technologies and techniques at the frontiers of the state of the art and within international projects and collaborations. She was among the pioneers in the use of Silicon Photomultipliers, which have had an enormous impact as photodetectors, and she is within the leading groups in the development of Compton cameras in the world. She also contributed to start the research in protontherapy in Spain.

Overall, she has been the P.I. of 2 European, 3 national Spanish and 6 regional projects and she has participated in more than 25 funded research projects, 7 of which European (FP7, H2020 and Horizon Europe). She has also been the P.I. of 3 innovation and valorization projects and two R&D contracts with companies, and she has one patent and one utility model. She collaborates with numerous groups in Germany, Italy, France, Slovenia and Canada, hospitals (La Fe in Valencia, Léon Bérard in Lyon), protontherapy centers (Quirónsalud in Madrid, CCB in Krakow) and companies (DAMAVAN, Alivaba Systems S.L.).

She has published 4 book chapters (2 of them as main author, and 1 as sole author), 76 articles in peer review journals, Q1 in scimago JR (18 as first author and 20 as supervisor, 35 of them with more than 20 citations and 15 with more than 40), and 95 conference records. Her h-index is 27. She also has presented her work in international conferences: 96 as main author (76 talks of which 21 invited) and close to 200 as co-author. In addition, she disseminates her work to the society regularly through talks for the general public, interviews, videos, round tables, etc.

Concernig training of young researchers, she participates in the Masters of Medical Physics and of Advanced physics of the University of Valencia since 2009 and 2014 respectively. She has supervised eight PhD theses (two more in course), several postdocs and 31 research works from Master, training and Erasmus+ students (see http://ific.uv.es/iris/en/publications/index.html#phd).

She has been associated editor of the journal Physica Medica (2020-2025), guest editor of Frontiers in Physics (2022) and reviewer of the main journals in the field. She has also been reviewer of projects for ANECA, AEI and FONCYT (Argentina), and evaluator of Juan de la Cierva postdoctoral fellowships. From March 2023 to December 2025 she has been member of the steering committee of the ASFAE (Planes Complementarios) projects of the Valencian region, and she is convener of Working Group 8: Applications of the Spanish instrumentation network CNID.

She also participates in the organization of national and international conferences such as ANIMMA 2025 (Chair of the local organizing committee and member of the scientific program committee), NDIP2026 (member of the the session ‘Oriented research, technology transfer and innovation of CPAN days (2018 - 2024), Medical Physics symposium of the RSEF biennial meeting (2017, 2019, 2022, 2024, 2026) and RSEF/IFIMED days (creator and main organizer 2016, 2018, 2020, 2023, 2025) .

In 2011 she was awarded with the IDEA award of the 'Fundación de las Artes y las Ciencias', and in 2013 she submitted a proposal to ERC StG that was selected for Step 2.

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

C.1. Publications – selection. *Corresponding author first. G. Llosá as leading author or supervisor underlined.*

1. L. Barrientos, M. Borja-Lloret, J.V. Casaña….and G. Llosá. (13/13, contributor and supervisor). *Gamma-ray sources imaging and test-beam results with MACACO III Compton camera*. EJMP 117 (2024) 103199. Cited 10 times.

2. G. Llosá, M. Rafecas (equal contribution). *Hybrid PET/Compton-camera imaging: an imager for the next generation*. Review article. EPJ. Plus (2023) 138:214. Cited 19 times.

3. E. Muñoz, A. Ros, M. Borja-Lloret,… and G. Llosá (9/9 contributor and supervisor). *Proton range verification with MACACO II Compton camera enhanced by a neural network for event selection*. Sci. Rep. 11, 9325 (2021). Cited 50 times.

4. Book chapter: *Compton cameras and their applications.* J. Roser, F. Hueso-González, A. Ros and G. Llosá. (supervisor and ¼ contributor). In the book *Radiation Detection Systems.* 38 pag. eBook ISBN 9781003218364. Ed. CRC Press. 2021.

5. E. Muñoz, J. Barrio, A. Etxebeste, C. Lacasta, J. F. Oliver, P.G. Ortega, C. Solaz and G. Llosá (8/8, contributor and supervisor) *Performance evaluation of MACACO: a multilayer Compton camera.* Phys. Med. Biol, 62 (2017), 7321. Cited 57 times.

6. Solevi, P.; Muñoz, E.; Solaz, …..; Llosá, G (11/11, supervisor). *Performance of MACACO Compton Telescope for Ion-Beam Therapy Monitoring: first test with proton beams*. Phys. Med. Biol., 2016, volume 61, num 14, 5149-5165. Cited 52 times.

7. G. Llosá, J. Cabello, S. Callier… J. Barrio (1/11, supervisor and leading contributor). *First Compton telescope prototype based on continuous LaBr3-SiPM detectors.* Nucl. Instr. Meth. A, 2012, vol 718, p130-133. Cited 51 times.

8. G. Llosá, J. Barrio, C. Lacasta … C. Piemonte (1/10, supervisor and leading contributor). *Characterization of a PET detector head based on continuous LYSO crystals and monolithic 64-pixel silicon photomultiplier matrices.* Phys. Med. Biol. 55 (2010) 7299-7315. In the top-ten PMB articles in this topic. Cited 64 times.

9. G. Llosá, R. Battiston, …A. Pozza (1/15, leading contributor). *Novel silicon photomultipliers for PET applications.* IEEE Trans. Nucl. Sci. 55(3), pp.877-881. Cited 33 times.

C.2. Congresses (as presenter), indicating the modality of their participation (invited conference, oral presentation, poster)

1. *Imaging tests with MACACO III+ Compton camera in phantoms and living mice*. K. Brzezinski, L. Barrientos, J. V. Casaña, I. Aiestaran, U. Cossio, J. Llop and G. Llosá. Talk at the European Molecular Imaging Meeting (EMIM) 2025. Bilbao, 11-14 March 2025.

2. *Compton cameras for cancer treatment assessment.* G. Llosá. Invited plenary Talk. Jagiellonian Symposium JS2024 (Krakow, 29 jun-7 jul 2024).

3. *Compton cameras for radiopharmaceutical therapy assessment.* G. Llosá et al. Talk at European Molecular Imaging Meeting EMIM 2024. Porto, 12-15 March 2024.

4. *Instrumentation for medical applications.* G. Llosá. Invited plenary talk. ASFAE workshop (Alicante, 4-6 Mar 2024).

5. *Individualized treatment verification based on photon emission.* Plenary invited talk. G. Llosá. ICDA4 international conference. Valencia, 16-20 October 2023.

6. *Compton and PET.* Invited talk. G. Llosá. ANIMMA 2021 associated Workshop N°3: Forum on Prospective technologies for the future PET imaging. Virtual, 21 June 2021.

7. *Final tests with MACACO: a Compton telescope for hadron therapy treatment monitoring.* G. Llosá, J. Barrio, A. Etxebeste, P. G. Ortega, C. Lacasta, E. Muñoz, J. F. Oliver, C. Solaz. Talk at 8th International Conference on New Developments in Photodetection. NDIP 2017. Tours, France, 3-7 July 2017.

8. *Compton telescope for hadron therapy treatment monitoring.* G. Llosá. Invited talk at World Cancer Congress, Barcelona (Spain) 19-21 May 2017.

C.3. Research projects, indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.

1. AIDER: Advanced Imaging DEtector for targeted Radionuclide therapy (GA. Num 101165088). EU HORIZON EUROPE. Coordinator and P.I. at IFIC: Gabriela Llosá. Duration: 1/9/2025 - 31/8/2029. Funding: 3 499 196.25 €. IFIC: 712 792.50 €.
2. IMMPRINT- Integrated molecular Imaging for Personalized Biomarker-based Breast Cancer Characterization and Treatment P.I. at IFIC Gabriela Llosá. European Union's "EURATOM" research and innovation program - 101061037 grant agreement. 01/04/24-31/03/27. 295 155 €.
3. PID2022-143246OB-I00, Medical imaging for Improved Diagnostics And Treatments (MIDAS) Ministerio de Ciencia, Innovación y Universidades. P.I. Gabriela Llosá. (Instituto de Física Corpuscular (IFIC), CSIC-Universitat de València). 01/09/23-31/08/26. 98371 €.
4. ASFAE/2022/019, ICOR- Imagen Compton para terapia con Radionúclidos. MICIU and Generalitat Valenciana. Planes complementarios. P.I. Gabriela Llosá. (IFIC) e Irene Torres (La Fe). 01/09/22-31/05/25. 299.920 €.
5. PID2019-110657RB-I00, MONDO- Monitorización y dosimetría en terapia hadrónica. MINISTERIO DE CIENCIA E INNOVACIÓN. P.I. Gabriela Llosá. (Instituto de Física Corpuscular (IFIC), CSIC-Universitat de València). 01/06/20-31/05/23. 98010 €.

C.4. Contracts, technological or transfer merits, Include patents and other industrial or intellectual property activities (contracts, licenses, agreements, etc.) in which you have collaborated. Indicate: a) the order of signature of authors; b) reference; c) title; d) priority countries; e) date; f) Entity and companies that exploit the patent or similar information.

Technology transfer projects as P.I.:

- PDC2021-121839-I00, VALID-Valorization of New Detectors for medical imaging. Ministerio de Ciencia e Innovación. I.P Gabriela Llosá. 01/12/21-30/11/23. 115.000 €.
- INNVA1/2021/37, VALMONT- Valorization of a hadron therapy monitoring system. Agencia Valenciana de Innovación (AVI). Generalitat Valenciana. I.P. Gabriela Llosá. 01/1/21-30/09/23. 337926.35 €
- UV-INV-PROVAL17-720859, Sistema de adquisición de datos multidetector Universitat de València. P.I. Gabriela Llosá. 07/09/2018-06/09/2019. 44.873,88 €.

R&D contracts:

- IMAS project for total body PET. Full Body Insight and CSIC. May 2021-June 2023. 80000 €.
- R&D contract between IGENOMIX R&D and CSIC. P.I CSIC Gabriela Llosá. 1 Jul -31 Dec 2019. 14972 EUR.

Patents:

- Gabriela Llosá; Carlos Lacasta; John Barrio. P201830795 and PCT/ES2020/070678. DISPOSITIVO, SISTEMA Y MÉTODO DE DETECCIÓN DE RADIACIÓN GAMMA Y PARTÍCULAS CARGADAS Y USO DE LOS MISMOS 31/07/2018. Spain, EU, USA, China.
- Carlos Lacasta; Gabriela Llosá; Vera Stankova; José Bernabéu; Carles Solaz. 201731615. DISPOSITIVO DE ADQUISICION DE DATOS PARA DISPOSITIVOS DETECTORES DE DIFERENTES TIPOS 29/12/2017. Spain. Exploited and commercialized by Alibava Sys S.L.