

CURRICULUM VITAE (maximum 2 pages)



Part A. PERSONAL INFORMATION

Part A. PERSONAL INFORMATION		CV date		2/06/2021	
First and Family name	YOLANDA FERNANDEZ JALVO				
ID number	50802982F	Age	59		
Researcher codes	Open Researcher and Contributor ID (ORCID)	0000-0002-1089-7136			
	SCOPILS Author ID	6603680696			

A.1. Current position

Name of Institution	Agencia Estatal del Consejo Superior de Investigaciones Científicas (CSIC)				
Museum/Department	Museo Nacional de Ciencias Naturales (MNCN), Dept. Palaeobiology				
Address and Country	José Gutiérrez Abascal, 2. 28006, Madrid (Spain)				
Phone number	91 566 89 65	E-mail	yfj@mncn.csic.es		
Current position	CSIC-Research Scientist		From	1999-promo: 2007	
Key words	Taphonomy, Experimental taphonomy, diagenesis, palaeoenvironment, palaeoclimate				

A.2. Education

PhD, Licensed, Graduate	University	Year
PhD	University Complutense of Madrid	1992
Licensed in Geology	University Complutense of Madrid	1985

A.3. GENERAL INDICATORS OF QUALITY OF SCIENTIFIC PRODUCTION

Sexennia: 3

Supervision of Thesis last 10 years. 2 as co-director (+2 PhD in progress) + 6 international PhD supervision.

Total Citation=3234

h Index= 31

Institutional Responsibilities: Scientific Responsible of the Laboratory of High Resolution and Electronic Microscopy (1999-present), Director of the Laboratory of Experimental Taphonomy (2009-present) and Scientific Responsible of the Experimental Field Station La Higueruela from the Museo Nacional de Ciencias Naturales (2013-present). Scientific Consultant of the Laboratory of small mammal taphonomy University of La Pampa (Argentina) CONICET. Member of the Palaeoanthropology Group of the MNCN-CSIC, in charge of Taphonomy. The status of Taphonomy in the scientific scenery of Paleobiology and Paleoanthropology gives special relevance to Taphonomy, because this is a transversal research, allowing participating in a diversity of research groups in Palaeontology: human evolution, palaeoclimatology, palaeogenetics, environment and ecosystem interpretations, Forensic studies. The origin of Taphonomy is the interpretation of the palaeoenvironment as well as past ecosystems at the highest level of resolution and basic to confirm dating results controlling absence/presence of reworking.

Part B. CV SUMMARY (<3,500 characters).

When I began my career as taphonomist in 1985, there were few specialists in Taphonomy, most of them based in the USA, and a handful in Europe and in Spain. I may say that since the very beginning my research has been part of the initial development of vertebrate taphonomy in my country. My first research was addressed to obtain indirect indication of human handedness based on experimental work and taphonomic traits as indirect evidence of brain laterality of Pleistocene hominins with T.G. Bromage and Bermúdez de Castro. I was pre-doctoral student of P. Andrews (Royal Society grants) and A. K. Behrensmeyer (Smithsonian Institution grant). Following these investigations, I was co-authoring several publications on the taphonomy of Sima de los Huesos.

My PhD thesis was, however, focused on the high resolution that small mammal taphonomy has in the interpretation of the past environments, ecosystems and climates of Atapuerca-Trinchera sites supervised by P. Andrews and Bermúdez de Castro. A postdoctoral fellowship in Montpellier (France) with C. Denys and a Fyssen project (French Foundation for the Evolution of the Human Brain) allowed me to investigate a climatic change proposed 1.8 Ma at Olduvai (Tanzania), which was traditionally considered to be the trigger of the Homo linage evolution. During the period 1996-2000 I could study an exceptional human behavior: cannibalism observed in Atapuerca (Gran Dolina, *Homo antecessor*) and in Gough's Cave (UK, *Homo sapiens*). I returned to London in 1997 with a 2-years European Mobility Fellowship (Marie Curie) of the Environment Program (ENV4-CT96-5043/DG12-ASAL) to study the influence of taphonomic factors preserving organic (collagen/DNA) and inorganic chemical component (bone apatite) and trace elements of bone and fossils incorporating Histologic studies to do research at structural level (Histotaphonomy). I continued this new approach when I got my permanent position at the CSIC in 1999 allowed me to contribute in the installation of the Electronic Microscopy Unit and years after, install the unique Laboratory of Experimental Taphonomy and Environmental Research. I have extended taphonomic research to botanic elements such as pollen (to help with palaeoecological and climatic interpretations), forensic research and health medicine, and human behaviours of extinct and extant human species.

I have supervised both national and international students, PhDs, master's thesis and post-doc projects, I participated in scientific committees, organized around 50 Congresses or international meetings, active member of international committees. More than 30 invited conferences in social, academic events. Participation in 31 projects, 24 internationals (15 as PI).



My research subject is of interest to academic levels and to the general public. Since 1993 I was invited to give conferences, seminars at National and International Universities, graduate and doctoral levels, talks to teachers and to school students. I have participated in different diffusion programs, both national and international broadcasting (TV-radio-newspapers, documentaries).

Part C. RELEVANT MERITS. C.1. Publications. Summary: 145 publications in journals and book chapters, 80 published in Scientific Impact Factor (SCI) journals, highly rated such as *Nature*, *Science*, PNAS, Quaternary Science Reviews, *Palaeogeography*, *Palaeoclimatology*, *Palaeoecology* or *Journal of Human Evolution*. About 21 articles in non-rated journals (No-SCI), 44 co-authored book-chapters or monographs. One edited and co-authored monograph (Senior Editor: *Azokh Cave and the Transcaucasian Corridor*, Dordrecht, Springer 2016. ISBN: 9783319249247), two co-authored books: *Atlas of Taphonomic Identifications* (Dordrecht, Springer 2016. ISBN: 9401774307); *Time in Taphonomy: A 30-Year Field Study in Wales (New York: NOVA.* 2019. ISBN: 9781536147391).

Peer reviewed publications, 10 selected

- 1. García-Morato, S., **Fernández-Jalvo, Y.,** Montalvo, C.I., ...Tomassini, R.L., Fernández, F.J. 2021. https://doi.org/10.1016/j.quascirev.2021.106816
- 2. Scott, L., Sobol, M., Neumann, F.H., Gil-Romera, G. **Fernández-Jalvo, Y,** Bourman, CB,Horwitz, L.K., van Aardt, A.C.2020. https://doi.org/10.1016/j.quaint.2020.10.065
- 3. Tomassini, RL, Montalvo, CI, Garrone, MC, et al. Fernández-Jalvo; Y. Cerda IA, 2020, 10.1038/s41598-020-67863-0
- 4. Fernández-Jalvo, Y., Andrews, P. (2019) https://doi.org/10.1016/j.quascirev.2019.03.028
- 5. Marín-Monfort, M.D., García-Morato, S., Olucha, R. Yravedra, J., Piñeiro, A. Narja, I., Andrews, P., **Fernández-Jalvo, Y.** (2019). https://doi.org/10.1016/j.quascirev.2019.106024
- 6. Rosell, J., Blasco, R., Arilla, M., Fernández-Jalvo, Y. 2019 https://doi.org/10.1016/j.quaint.2019.05.013
- 7. Williams, J., Andrews, P., García-Morato, S., Villa, P., Fernández-Jalvo, Y. (2018). https://doi.org/10.1017/pab.2018.13
- 8. **Fernández-Jalvo, Y.,** Tormo, L., Andrews, P., Marin-Monfort, M.D. (2018) https://doi.org/10.1016/j.quaint.2018.05.028
- 9. Andrews, P. and Fernández-Jalvo, Y. (2018). https://doi.org/10.1002/oa.2656
- 10. Pesquero, Bell and Fernández-Jalvo (2018) https://doi.org/10.1080/08912963.2017.1371713

C.2. RESEARCH PROJECTS (2017-2021)

C.2. Projects.

- CSIC: **PIAR- 201938015**. Trabajos de campo en las localidades de Salto de Piedra en la Provincia de Buenos Aires y en Villa Guasayán en Santiago del Estero (Argentina): influencia de los humanos en el entorno y viceversa. 2020-2021
- CGL2016-79334-P (31 December, 2016-31 December 2020). Taphonomic and Taxonomic studies: implication in Palaeocology and Climatic Change
- i-COOP2017B-20287 (2017-2018). Estudio de las faunas de Argentina y España durante periodos Climáticos Críticos. IP CSIC: Yolanda Fernández Jalvo / IP extranjero: Fernando J. Fernández
- 2018/2019. **Leakey Foundation** (General Grant). Taphonomic study of the onset and evolution of the use of fire at Wonderwerk Cave (South Africa). IP Yolanda Fernández-Jalvo

Summary: Dr. Fernández-Jalvo collaborates regularly in research projects with researchers highly qualified from various countries and specialties such as Prof. Peter Andrews, Natural History Museum, UK; Prof. Louis Scott, University of the Free State, South Africa; Prof. Christiane Denys, CNRS, Museum d'Histoire Naturelle France; Prof. Lynne Bell, Simon Fraser University, Canada; Dr. Eva-Maria Geigl, director of the Laboratory of Paleogeneome at the Institut Jacques Monod, France; Dr. Claudia Montalvo (UNLP) Argentina. Dr. Fernández Jalvo also collaborates with natural parks of Spain, United Kingdom, France, South Africa. Participation in 33 projectos, 24 Internacionales, 17 como Investigador Principal.

STUDENT SUPERVISION (2017-2021):

Doctoral Theses defended: supervision (S), reporter advisory (R):

2017(R). E.Baquedano (Universidad de Valladolid, Spain)

2017 (R). Miguel Maté (Universidad de Valladolid, Spain)

2018 (R). Malsabel Expósito Barea (Universidad Rovira I Virgili, Spain)

2019 (S). Patricia Canales Brellenthin (Universidad Complutense de Madrid, Spain)

2019 (R). Monica Fernández. (Universidad de Ferrara, Italy)

2019 (R). Raphaël Hanon. (Museum d'Histoire Naturelle, Paris)

Postdoctoral Supervisor: Romina Frontini. 25/01/2017-17/04/2017 & Rodrigo Tomassini. 17/04/2017-17/07/2017 Univ.Nacional del Sur, Argentina. Timisay Monsalve October, 2019 (Universidad de Antioquía, Colombia).

SEMINARS & INVITED CONFERENCES 2017-2021

- 2018. 15-30 July. Curso postgrado: Universidad Nacional de La Pampa. **Cómo entender la Tafonomía, sus** aplicaciones y utilidades (40h). 51 participants
- Café Científico. 26 July, 2018. La vida de los primeros humanos: del inicio del fuego a las prácticas caníbales in "Moka, Bar+Café Cultural" Santa Rosa, La Pampa
 - 2018. 9 August. *Tafonomía: Forenses de Fósiles*. INCUAPA/Universidad Nacional de Olavarría (Argentina)
 - 2019. February. Spy Cave Neanderthals (Belgium): Crime or accident Museo Nacional de Ciencias Naturales (Spain)
 - 2019. March. ¿Qué es Tafonomía?. Sociedad de Amigos del Museo Nacional de Ciencias Naturales (Spain)