Fecha del CVA	16/09/2019

Parte A. DATOS PERSONALES

Nombre y apellidos	YOLANDA FERNANDEZ JALVO		
DNI/NIE/pasaporte	50802982F	Edad	56
Núm. identificación del investigador	Researcher ID	Author ID: 6603680696	
	Código Orcid	orcid.org/0000-0002-1089-7136	

A.1. Situación profesional actual

Organismo	AGENCIA ESTATAL DEL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS			
Dpto./Centro	MUSEO NACIONAL DE CIENCIAS NATURALES			
Dirección	JOSE GUTIERREZ ABASCAL, 2. 28006-MADRID (ES)			
Teléfono	9156689 65	correo electrónico	yfj@mncn.csic.es	
Categoría profesional	Investigador Científico		Fecha inicio	1999(2007)
Espec. cód. UNESCO	2416-paleontologia			
Palabras clave	Tafonomía, neotafonomía, alteraciones diagnósticas, diagénesis, paleoambiente, clima,			

A.2. Formación académica *(título, institución, fecha)*

Licenciatura/Grado/Doctorado	Universidad	Año
Licenciatura	Universidad Complutense de Madrid	1985
Tesis Doctoral	Universidad Complutense de Madrid	1992

A.3. Indicadores generales de calidad de la producción científica *(16/07/2019)*

Tesis doctorales en los últimos 10 años. **2 +supervisión y/o revisor externo de 6 más.**
Citas totales=**2697**
Índice h= **25**

Summary: 132 publications in journals and book chapters, 66 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 20 articles in non-rated journals (No-SCI), 46 co-authored book-chapters or monographs. Two co-authored books (Atlas of Taphonomic Identifications and) and one edited monograph (Senior Editor) published both of them by Springer.

Parte B. RESUMEN LIBRE DEL CURRÍCULUM *(máximo 3500 caracteres, incluyendo espacios en blanco)*

My contribution to the field of taphonomy and anthropology is twofold. On the one hand, studies related to research involving human behavior, social strategies, histology, preservation/transformation of organic and inorganic bone components (e.g. collagen, DNA). On the other, my investigations are referred to site formation and interpretations of past environments and climates.

The status of Taphonomy in the scientific scenery of Paleobiology and Paleoanthropology gives special relevance to Taphonomy, because this is a transversal research between taxonomic and geography-geological time, allowing me to participate at the Palaeoanthropological Group of CSIC as team member, and obtaining join projects with members of the Palaeobiology Department of the MNCN (such as M.T.Alberdi on Global Palaeo-Climatic Changes: CGL2016-79334-P). Therefore, I have join projects with members of one and the other groups. In fact, Taphonomy is also transversal with other investigations, such as geology, palaeogenetics, environmental studies and past ecosystem interpretations, as well as Forensic studies. The interest and application of taphonomic principles, experiments and protocols are not only common in Forensic studies, but also applied to other disciplines and investigations, such as handmade objects such lithic tools. The limit of taphonomy is a question of applicability. So far knowledge could at some extend be applied to interpret how these objects (bone or human-made tools) arrived to our times and which processes allowed them to survive. In this respect, our Laboratory of Experimental Taphonomy http://www.mncn.csic.es/seccion=1257 can be applied to different objects and subjects.

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. Following these investigations I was co-authoring several investigations on the Sima de los Huesos (Atapuerca) hominin assemblage to taphonomically characterize influence of human behaviors and other biological and geological agents. My PhD Thesis was, however, focused to the high resolution that small mammal taphonomy has in the interpretation of the environment and climates. A postdoctoral fellowship in Montpellier (France) 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. I returned to London in 1997 with a 2 year European Mobility Fellowship of the highly competitive Environment Program to study the influence of taphonomic factors preserving organic and inorganic chemical component and trace elements of bone and fossils. I continued this new approach when I got my permanent position at the CSIC in 1999. During the period 1996-2000 I could study an exceptional human behavior observed in Atapuerca (Gran Dolina, *Homo antecessor*) and Gough's Cave (UK, *Homo sapiens*): cannibalism. Already at the MNCN as permanent staff, I established close collaborations with a wide and diverse research group of specialists in taphonomy, bone diagenesis, histotaphonomy, DNA preservation, pollen taphonomy and Forensic studies. Since 1999: scientist responsible for the Electron Microscopy Laboratory (EM Lab) that has improved capacities and became now a reference lab. In 2009 I installed the Laboratory of Experimental Taphonomy (LET), also world reference lab.

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.**

Parte C. MÉRITOS MÁS RELEVANTES *(ordenados por tipología)*

C.1. Publicaciones. SCI OR PEER REVIEWED JOURNALS

1. Fernández-Jalvo, Y., Andrews, P. (2019) Spy cave (Belgium) Neanderthals (36,000y BP). Taphonomy and peri-mortem traumas of Spy I and Spy II: Murder or accident. Quaternary Science Reviews, 217, 119-129. https://doi.org/10.1016/j.quascirev.2019.03.028
2. Tomassini, R.; Montalvo, C.I., Fernández-Jalvo, Y., Garrone, M.C., Skin, M.S. (2019). Modern plains vizcacha (Lagostomus maximus, Chinchillidae, Rodentia) as a bone accumulating agent in the Argentine Pampas: Application to the study of fossiliferous sites. Journal of Arid Environments 161, 11-24. https://doi.org/10.1016/j.jaridenv.2018.09.007
3. Rosell, J., Blasco, R., Arilla, M., Fernández-Jalvo, Y. Very human bears: Wild brown bear neo-taphonomic signature and its equifinality problems in archaeological contexts. Quaternary International 517, 67-78 https://doi.org/10.1016/j.quaint.2019.05.013
4. Frontini, R., Fernández-Jalvo, Y., Pesquero Fernández, M.D., Vecchi, R., Bayón, C. (2019) . Abrasion in archaeological fish bones from sand dunes. An experimental approach. Archaeological and Anthropological Sciences 11,4891-4907. https://doi.org/10.1007/s12520-019-00834-3
5. García-Morato, S.; Marin-Monfort, D.; Fernández-Jalvo, Y. 2019. Rolling bones: a preliminary study of micromammal abrasion on different initial taphonomic stages. Paleontologica Electronica 22, pvc-2
6. Williams, J., Andrews, P., García-Morato, S., Villa, P., Fernández-Jalvo, Y. (2018). Hyena as predator of small mammal? Taphonomic analysis from the site of Bois Roche, France. Paleobiology 44, 511-529. **DOI**: 10.1017/pab.2018.13
7. Fernández-Jalvo, Y., Tormo, L., Andrews, P., Marin-Monfort, M.D. (2018) Taphonomy of burnt bones from Wonderwerk Cave (South Africa) Quaternary International 495, 19-29. https://doi.org/10.1016/j.quaint.2018.05.028
8. Andrews, P. and Fernández-Jalvo, Y. (2018) Seasonal variation in prey composition and digestion in small mammal predator assemblages. International Journal of Osteoarchaeology 28, 318-331. **DOI:** 10.1002/oa.2656
9. García-Morato, S., Sevilla, P., Panera, J., Rubio-Jara, S., Sesé, C., Fernández-Jalvo, Y. (2018) Rodents, rabbits and pellets in a fluvial terrace (PRERESA site, Madrid, Spain) . Quaternary International DOI: 10.1016/j.quaint.2018.04.012
10. Pesquero, Bell and Fernández-Jalvo (2018) Skeletal modifications by microorganisms and their environments. Historical Biology 30, 882-893. https://doi.org/10.1080/08912963.2017.1371713
11. Marin-Monfort, M.D., Suñer, M., Fernández-Jalvo, Y. (2018). Characterization of recent marks produced on fossil bone surface during sullegic and trephic processes and their influence on taphonomic studies. Quaternary International 481, 3-13. http://dx.doi.org/10.1016/j.quaint.2017.07.039
12. C. Denys;E. Stoetzel;P. Andrews;S. Bailon;A. Rihane;J. B. Huchet;Y. Fernandez-Jalvo;V. Laroulandie (2018) Taphonomy of Small Predators multi-taxa accumulations: palaeoecological implications. Historical Biology 30, 868-881 DOI:10.1080/08912963.2017.1347647
13. Fernandez, F.J., Montalvo, C.I., Fernandez-Jalvo, Y., Andrews, P. Lopez, J.M. (2017) A re-evaluation of the taphonomic methodology for the study of small mammal fossil assemblages of South America. Quaternary Science Reviews 155, 37-49. http://dx.doi.org/10.1016/j.quascirev.2016.11.005
14. Fernández-Jalvo, Y., Andrews, P., Denys, C., Sesé, C., Stoetzel, E., Marin-Monfort, D., Pesquero, M. D. (2016) Taphonomy for taxonomists: Implications of predation in small mammal studies. Quaternary Science Reviews 139, 138-157. http://dx.doi.org/10.1016/j.quascirev.2016.03.016
15. Guimaraes, S., Fernandez-Jalvo, Y., Stoetzel, E., Gorgé, O., Bennett, E. A., Denys, C., Grange, T. &. Geigl, E.-M. (2016) Owl pellets: a wise DNA source for small mammal genetics. Journal of Zoology 298, 64-74 (doi:10.1111/jzo.12285)
16. Walker, M.J., Anesin, D., Angelucci, D.E., Avilés-Fernández, A., Berna, F., Buitrago-López, A.T., Fernández-Jalvo, Y., Haber-Uriarte, M., López-Jiménez A., López-Martínez, M., Martín-Lerma, I., Ortega-Rodrigáñez, J., Polo-Camacho J.-L., Rhodes, S.E., Richter, D., Rodríguez-Estrella, T., Schwenninger, J.-L. & Skinner, A.R. 2016. Combustion at the late

Early Pleistocene site of Cueva Negra del Estrecho del Río Quípar (Murcia, Spain) ANTIQUITY 90 351, 571–589. doi:10.15184/aqy.2016.91

17. Rhodes, S.E., Walker, M.J., López-Jiménez, A., López-Martínez, M., Haber-Uriarte, M., Fernández-Jalvo, Y. Chazan, M. (2016). Fire in the Early Palaeolithic: Evidence from burnt small mammal bones at Cueva Negra del Estrecho del Río Quípar, Murcia, Spain. Journal of Archaeological Science Reports 9, 427-436. http://dx.doi.org/10.1016/j.jasrep.2016.08.006
18. Fernández-Jalvo, Y., Pesquero, M.D., Tormo, L. (2016). Now a bone, then a calcite. *Palaeogeography Palaeoclimatology Palaeoecology* 444, 60-70
19. Pesquero D.M., Souza-Egipsy, V., Alcala, L.,Ascaso, C. Fernandez-Jalvo, Y. (2015) Calcium phosphate preservation of faecal bacterial negative moulds in hyaena coprolites Acta Palaeontologica Polonica 59, 997-1005
20. Pesquero, M.D.; Alcala, L.; Bell, L. S.; Fernandez-Jalvo, Y. (2015) Bacterial origin of iron-rich microspheres in Miocene mammalian fossils *Palaeogeography Palaeoclimatology Palaeoecology* 420, 27-34
21. Fernandez-Jalvo, Y.; Andrews, P.; Tong, H. (2015)Taphonomy of the Tianyuandong human skeleton and faunal remains. *Journal of Human Evolution* 83, 1-14
22. Fernandez-Jalvo, Y., Avery, D. M. (2015) Pleistocene Micromammals and Their Predators at Wonderwerk Cave, South Africa *African Archaeological Review* 32 751-791
23. Pesquero, M.D. y Fernández-Jalvo, Y. (2014). Bioapatite to calcite, an unusual transformation seen in fossil bones affected by aquatic bioerosion. *Lethaia* 47, 533-546 (DOI: 10.1111/let.12079)
24. Fernández-Jalvo, Y., Andrews, P., Sevilla, P., Requejo, V. (2014). Digestion vs. Abrasion in rodent bones. *Lethaia* 47, 323-336 (DOI: 10.1111/1475-4754.t01-1-00068)
25. Gil-Romera, G., Neumann, F.H., Scott, L. Sevilla-Callejo, M. Fernández-Jalvo, Y. (2014). Pollen taphonomy from hyaena scats and coprolites: preservation and quatitative differences. Journal of Archaeological Sciences 46, 89-95.
26. Michael Wysocki, Seren Griffiths, Robert Hedges, Alex Bayliss, Tom Higham, Yolanda Fernandez-Jalvo and Alasdair Whittle (2013). Dates, Diet, and Dismemberment: Evidence from the Coldrum Megalithic Monument, Kent. *Proceedings of the Prehistoric Society* 79, 1-30. DOI: 10.1017/ppr.2013.10.
27. Marín-Monfort, M.D., Pesquero, M.D. , Fernández-Jalvo, Y. (2013). Compressive marks from gravel substrate on vertebrate remains: a preliminary experimental study. Quaternary International 330, 118-125 http://dx.doi.org/10.1016/j.quaint.2013.10.028.
28. Pesquero, M.D., Souza-Egipsy, V., Alcalá, L., Ascaso, C. and Fernández-Jalvo, Y. (2013) Calcium phosphate preservation of faecal bacterial negative moulds in hyaena coprolites. Acta Palaeontologica Polonica Instytut Paleobiologii PAN (http://dx.doi.org/10.4202/app.2012.0067).
29. Cáceres, I. Esteban Nadal, M. Bennàssar, M., Marín-Monfort, D., Pesquero, M.D., Fernández-Jalvo, Y. (2013). Osteophagia and dental wear in herbivores: actualistic data and archaeological evidence. *Journal of Archaeological Science* 40, 3105-3116
30. Pesquero, M.D., Alcalá, L. Fernández-Jalvo, Y. (2013). Taphonomy of the reference Miocene vertebrate mammal site of Cerro de la Garita, Spain. *Lethaia* 46, 378-398.
31. Andrews, P., Fernández-Jalvo, Y. (2012). How to approach to perimortem injury and other modifications. In: L.Bell (ed). *Forensic Microscopy for Skeletal Tissues and Protocols, Methods in Molecular Biology* vol. 915, 191-225. Springer, The Netherlands.
32. Chazan, M., Avery, D. M., Bamford, M. K., Berna, F., Brink, J., Fernandez-Jalvo Y., Goldberg P., Holt F S., Ari, M., Porat N., Hagai, R., Rossouw, L., Scott, L., Kolska Horwitz, L. (2012) The Oldowan horizon in Wonderwerk Cave (South Africa): archaeological, geological, paleontological and paleoclimatic evidence. *Journal of Human Evolution* 63, 859-866. (http://dx.doi.org/10.1016/j.jhevol.2012.08.008).
33. Robert J. Blumenschine, Ian G. Stanistreet, Jackson K. Njau, Marion K. Bamford, Fidelis T. Masao, Rosa M. Albert, Harald Stollhofen, Peter Andrews, Kari A. Prassack, Lindsay J. McHenry, Yolanda Fernández-Jalvo, Eileen L. Camilli, James I. Ebert (2012) Environments and hominin activities across the FLK Peninsula during *Zinjanthropus* times (1.84 Ma), Olduvai Gorge, Tanzania. *Journal of Human Evolution* 63, 364-383.
34. Andrews, P. & Fernández-Jalvo, Y. (2012). Bronze Age barrows at Longstone Edge: Taphonomy and site formation. Quaternary International 275, 43-54. (doi: 10.1016/j.quaint.2011.06.041).
35. Cáceres, I. Esteban Nadal, M. Bennàssar, M., Fernández-Jalvo, Y. (2011) Was it the deer or the fox? Journal of Archaeological Science 38, 2767-2774.
36. Fernández-Jalvo, Y., Scott, L., Andrews, P. (2011) Taphonomy in palaeoecological interpretations, *Quaternary Science Reviews* 30, 1296-1302 (doi:10.1016/j.quascirev.2010.07.022).
37. Fernandez-Jalvo, Y., Andrews, P. (2011, doi: 10.1016/j.jhevol.2010.08.003) When humans chew bones. *Journal of Human Evolution* 60, 117-123

Books: 1. (co-authored book) Fernández-Jalvo, Y. & Andrews, P. (**2016***) Atlas of Taphonomy*, New York: Springer (19.5K downloads). **2.** Andrews, P. and **Fernández-Jalvo, Y.** (2019). Time in Taphonomy: A 30-Year Field Study in Wales. New York: NOVA **Edited volume: Fernández-Jalvo, Y.;** King, T. Yepiskoposyan, L. Andrews, P. (eds) **2016**) *Azokh Cave and the Transcaucasian Corridor.* New York: Springer. (~4Kdownloads/6 chapters co-authored)

C.2. Proyectos. Participation in 31 projectos, 24 Internacionales, 15 como Investigador Principal:

- 2002-2009-present. Field director excavations of Azokh Cave (Republic of Nagorno-Karabagh)and co-leader of scientific research of the international research group
- 2004-2006. I3 FP6 European Community Programme (SYNTHESYS_ RII3-CT-2003-506117)
- 2004-2006. NSF (National Science Foundation). Revealing hominids origins (RHOI)
- 2005-2008. Cancer and Human Evolutionary Research: An Integrative Science and Technology project (USA/ES)
- 2005-presente. Asesor científico proyectos de investigación de Univ. Pampa-CONICET dirigidos por C.Montalvo
- 2008-2010. Pollen Taphonomy Joint Project South Africa (NRF) and Spain (Ministry of Science and Innovation)
- 2010-2014. Agence Nationale de la Recherche (ANR) MOHMI. Influence de l'installation des hommes modernes au Maroc sur l'évolution de la biodiversité des petits vertébrés terrestres
- 2010-present. Project of Wonderwerk Cave (South Africa), small mammal and combustion taphonomy
- 2000-present. Principal Investigator of subsequent tri-annual Projects funded by the Spanish Ministry of Science and Education: BTE2000-1309, BTE2003-01552, BTE2007-66231, BTE2010-19825, CGL2016-79334-P. **i-COOP2017B-20287** (2017-2018)
- 2018/2019. Leakey Foundation General Grant. Taphonomic study of the onset and evolution of the use of fire at Wonderwerk Cave (South Africa)

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.

STUDENT SUPERVISION (2011-2017):

Doctoral Theses supervision (S), reporter/reader (R):

2011.(R). Constance Hanquet (Université Montpellier-Paul Valery, Francia)
2011 (R) Célimène Mussini (Université Bordeaux 1, Francia)
2015 (S) M.D.Marin-Monfort (Universidad Autónoma de Madrid, Spain)
2016 (R). M.C. Arriaza (Universidad Autónoma de Madrid, Spain)
2016 (R). Caitlin Syme (University of Queensland, Australia)
2016 (S&R). Olivier Gorgé (Université Paris-Saclay, Francia)
2017(R). E.Baquedano (Universidad de Valladolid, Spain)
2017 (R). Miguel Maté (Universidad de Valladolid, Spain)

Masters and University Project supervisions:

2011. (S) Virginia Requejo, (Universidad Complutense de Madrid-UCM)
2015 (S) Lucía Rueda (Université de Rennes, France)
2016 (S). Sara García Morato (Universidad Rey Juan Carlos)
2017 (S). Sara García Morato (Universidad Complutense de Madrid**)**

Postdoctoral Supervisor: Dr. Dolores Pesquero- Juan de la Cierva (MICINN) 2008-2011/ Fernando Fernández 1/06-01/09/2015. Romina Frontini. 25/01/2017-17/04/2017 & Rodrigo Tomassini. 17/04/2017-17/07/2017 Univ.Nacional del Sur, Argentina

CONGRESSES: Relevant participation in congresses & INVITED CONFERENCES in the last 5 years.

2014. **TAPHOS' 2014,** University of Ferrara (Italy) 9-13 September. Plenary conference (Taphonomy: to bias or not to bias?), scientific committee member and session chairperson. • 2014. **12th ICAZ (International Conference of Archaeozoology)** San Rafael (Argentina) 22-27 September, 2014. Chairperson and co-organizer with Dr. C. Montalvo of the session: **Taphonomy: Interpreting the environmental context**

• 2014. **4th IPC (International Palaeontological Congress)** Mendoza (Argentina) 28 September-4th October, 2014. Chairperson and co-organizer with Dr. C. Montalvo of the session: **Vertebrate Taphonomy: applications and implications.**

• 2015. OIKOS, plenary conference. When fossils talk. Barcelona **2015**.

• 2015. **Réunion du GDR 3591 TaphEna** 16-17 septembre, 2015. Paris Museum National d'Histoire Naturelle. Conference and Round Table Invited Conference: *Small mammal Taphonomy: contributions to palaeoecology*

• 2016. JAKIUNDE: CLIMATIC CRISIS AND HUMAN EVOLUTION. *Human Cannibalism: crisis or strategy?* University of Bilbao (Spain).

• 2016. **ICAZ TAPHONOMY WORKING GROUP MEETING (Paris, Septiembre 2016).** Scientific Committee.

• 2016**. ICAZ MICROMAMMAL WORKING GROUP MEETING (Alcalá de Henares, Septiembre, 2016).** Scientific Committee.

• 2018. ***Tafonomía: Forenses de Fósiles.*** INCUAPA/Universidad Nacional de Olavarría (Argentina) 9 agosto

• 2018_1-15th December, 2018. 1st Palaeontological Virtual Congress. Scientific Committee, attendance and participation (Rolling Rodents: S. García-Morato, M.D. Marin-Monfort and Y. Fernández-Jalvo.