

**Parte A. DATOS PERSONALES****Fecha del CVA**

10.10.2019

Nombre y apellidos	Jesús Valentín Jorrín Novo		
Núm. identificación del investigador	Researcher ID L-1656-2014	L-1656-2014	
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	Código Scopus	ID: 57200010499	

**A.1. Situación profesional actual**

Organismo	Universidad de Córdoba		
Dpto./Centro	Bioquímica y Biología Molecular		
Dirección	Campus de Rabanales. Edif. Severo Ochoa, planta baja E-14071 Córdoba. Spain		
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Categoría profesional	Catedrático de la Universidad de Córdoba		
Espec. cód. UNESCO	2415, 2417, 3101, 3108		
Palabras clave	dehesa, encina, biodiversidad, estreses, seca, cambio climático, ómicas, proteómica, metabolómica, transcriptómica, bioinformática.		

**A.2. Formación académica**

Licenciatura/Grado/Doctorado	Universidad	Año
Licenciatura en Ciencias Biológicas (Bioquímica y Biología Molecular)	Facultad de Ciencias Biológicas. Universidad Autónoma de Madrid	24-diciembre-1980
Grado de Licenciatura en Ciencias Biológicas. Tesis de Licenciatura	Facultad de Ciencias Biológicas. Universidad de Córdoba	9-noviembre-1982
Doctorado Ciencias Biológicas	Facultad de Ciencias Biológicas. Universidad de Córdoba	31-octubre-1986

**A.3. Indicadores generales de calidad de la producción científica**

**Web of Science (WoS).** 142 publications listed, 3272 citations (2716 excluding self-citation), cited in 2143 articles (2035 excluding self-citation, 23,21 cites per article. **h INDEX 33**

**Research Gate:** RG 42,3 (97,5%), 215 research items, 20421 reads, 3932 citations, 3523 profile views, h-index 36

**Parte B. RESUMEN LIBRE DEL CURRÍCULUM**

Ph D in Biology at the University of Córdoba (1986). After two years of postdoc at the Royal Holloway University of Cordoba (1987-88) and the Samuel Robert Noble Foundation, Ardmore, I joined the Department of Biochemistry and Molecular biology, being, since then, assistant profesor (1988-1991), Lecturer (1991-2012), and Full Professor (2012- ). Head of the Agroforestry and Plant Biochemistry, Proteomics, and Systems Biology Research Group (AGR-164; <http://www.uco.es/investiga/grupos/probiveag/>) since 2010. My activity has been recognized by the University of Córdoba, Andalusian Regional Assessment and Spanish Agencies, with 5 positive evaluations (six years term each) since 1986.

I have tried in all my professional life to follow what I do understand is the main mission of the University, to connect the research and the academy, and offer to undergraduate, master, and Ph. D. students the possibility of an active participation in research projects as a mean of being trained and

educated in science. Thus, I have supervised / co-supervised 23 doctoral theses, with 5 more in progress, 14 master's theses and 27 degree'S theses.

I have participated, in the last 10 years in 5 national (4 as IP), and 5 European financed projects, plus 7 financed by different Latin American and Portuguese agencies.

I have shown throughout my professional career, the capacity of establishing national and international collaborations and in the last ten years it has mostly focused on Latin America. I have participated in research projects funded by national agencies with groups from Portugal, Brazil, the Dominican Republic, Argentina, Paraguay and Colombia. I have participated, since 2004 in 5 projects financed by the EU within different programs. Some of the publications have been co-authored with groups from Brazil, Japan, France, Austria, Germany and Argentina. During the last ten years, I have supervised PhD students not only from Spain, but from other countries (Algeria, Paraguay, Portugal, Brazil, Turkey, Dominican Republic, Tunisia, Mexico). Besides, during the same time I have received 31 foreign doctoral or postdoctoral students (Brazil, Italy, Bulgaria, Argentina, Turkey, Colombia, Poland, France, Chile, Argentina and Cuba) for periods from one month to one year.

I am a senior editor of Journal of Proteomics and Acta Physiologie Plantarum, associated editor of Frontiers in Plant Sciences-Proteomics, and member of the editorial board of six more journals. I participate as a regular reviewer for around 50 journals within the plant sciences, biochemistry and molecular biology, and proteomics areas. Also, I am project evaluator for Spanish-speaking and other countries (Belgium, France, Switzerland, Israel, Slovakia, Czech Republic, Colombia, Argentina, and Uruguay) agencies. I have organized or being part of the scientific/organizing committees of 21 International meetings.

I am well recognized at the international level for my contributions in the plant proteomics field and more concretely to the forestry field. I have participated in the creation of the Spanish Proteomics Society (SEProt), and the European Proteomics Association (EuPA), where I played an important role up to 2015. I also participated in the launch of the Journal of Proteomics. I have been responsible for the plant proteomics section within events of SEProt, EuPA and HUPO.

I have made important and recognized contributions to the study of parasitic plants and, in the last 15 years, to forest tree species at the molecular and proteomic level. Both are defined as recalcitrant and orphan species of great difficulty from an experimental point of view. It is my main goal now to move in the Systems Biology direction by integrating –omics approaches and data with those of classical biochemistry, and physiology in order to catalogue forest tree populations, and to understand the molecular bases of the germination process, recalcitrance, and the responses to biotic and abiotic stresses.

## Parte C. MÉRITOS MÁS RELEVANTES

### C.1. Publicaciones (fives last years; papers in which I am the senior and corresponding author). Only publications related to the proposal are included

1. Castillejo et al. 2019. Proteomics and the forest tree Holm oak (*Quercus ilex* L.), an orphan and recalcitrant experimental plant system: how do they see each other? International Journal of Molecular Sciences 20, 692; doi:10.3390/ijms20030692.
2. Romero-Rodríguez et al. 2019. Toward characterizing germination and early growth in the non-orthodox forest tree species *Quercus ilex* through complementary gel and gel-free proteomic analysis of embryo and seedlings Journal of Proteomics 197, 60-70; doi: 10.1016/j.jprot.2018.11.003.
3. Guerrero Sanchez et al. Ion Torrent and Illumina, two complementary RNA-seq platforms for constructing the holm oak (*Quercus ilex*) transcriptome. PLOS One 14: e0210356. <https://doi.org/10.1371/journal.pone.0210356> .
4. Romero Rodríguez et al. Germination and early seedling development in *Quercus ilex* recalcitrant seeds: transcriptional, hormonal, and sugar profiling. Front. Plant Sci. 9:1508.doi: 10.3389/fpls.2018.01508.

5. Simova-Stoilova et al. 2018. Holm oak proteomic response to water limitation at seedling establishment stage reveals specific changes in different plant parts as well as interaction between roots and cotyledons. **Plant Science**, 276, 1-13. <https://doi.org/10.1016/j.plantsci.2018.07.007>.
6. Lopez-Hidalgo et al. 2018. A multi-omics analysis pipeline for the metabolic pathway reconstruction in the orphan species *Quercus ilex*. **Frontiers in Plant Sciences**. 9: 935. doi: [10.3389/fpls.2018.00935](https://doi.org/10.3389/fpls.2018.00935).
7. Fernández I Martí et al. 2018. Population genetic diversity of *Quercus ilex* subsp. *ballota* (Desf.) Samp. reveals divergence in recent and evolutionary migration rates in the Spanish Dehesas. **Forests**, 9, 337; doi:10.3390/f9060337.
8. Sghaier-Hammami et al. B2016. Protein profile of cotyledon, tegument, and embryonic axis of mature acorns from a non-orthodox plant species: *Quercus ilex*. **Planta** 243(2), 369-396.
9. Simova-Stoilova et al. 2015. 2-DE proteomics analysis of drought treated seedlings of *Quercus ilex* supports a root active strategy for metabolic adaptation in response to water shortage. **Frontiers in Plant Science** 6, 627. doi: 10.3389/fpls.2015.00627.
10. Romero-Rodríguez et al. 2014. Improving the quality of protein identification in non-model species. Characterization of *Quercus ilex* seed and *Pinus radiata* needle proteomes by using SEQUEST and custom databases. **Journal of Proteomics** 14, 85-91.

## C.2. Proyectos en los que he participado (last 5 years)

**Foreign scientist. Proteases from Chilean autoctonous plant species from the *Puya* genus: isolation and characterization as potential bioactive compounds to be used in Agriculture and Medicine** (Aislamiento de Proteasas a Partir de Plantas Autóctonas del Género *Puya* (Familia Bromeliaceae) para Potenciar sus Usos en la Agricultura y la Salud. Universidad de Concepción, Proyecto de iniciación 2018 de la Vicerrectoría de Investigacion y Desarrollo. IP. Martha de la Caridad. Facultad de Ciencias Forestales, Universidad de Concepción, Chile. Submitted proposal (April 2018).

**Foreign scientist. Desvendando as interações hospedeiro-patógeno na doença do cancro resinoso do pinheiro.** UrgentPine. TDC/AGR-FOR/2768/2014. Fundação para a Ciência e a Tecnologia (FCT), Portugal. 2017-2020. €199.721,00

**IP. Studies of variability and responses to stresses in Holm oak by using a multi-omics approach (transcriptomics, proteomics and metabolomics).** Estudios de variabilidad poblacional y respuesta a estreses en encina mediante una aproximación multi-ómica (transcriptómica, proteómica y metabolómica. Entidad financiadora: Proyectos EXCELENCIA y Proyectos RETOS Dirección General de Investigación Científica y Técnica Subdirección General de Proyectos de Investigación. **2016-2019. 150.000 Euros.**

**Foreign scientist. Estratégias de genômica e proteômica avançada visando o controle da podridão negra em brássicas.** IP Angela Metha. Entidad financiadora: Ministerio de Ciencia Tecnología e Innovacao-CNPq, Brasil. 2015-2018. 80,000 Euros.

**Foreign scientist. The employment of -omics techniques in the characterization and molecular study of five natural populations of *Pinus occidentalis* Swart** (Caracterización de procedencias y empleo de técnicas de aproximación -ómica para el estudio fisiológico y molecular de cinco poblaciones naturales de *Pinus occidentalis* Swart.) IP: **Luis Enrique Rodríguez de Francisco**. Fondo Nacional de Innovación y Desarrollo Científico y Tecnológico, del Ministerio de Educación Superior Ciencia y Tecnología. 2015-2018. 80,000 Euros. 2016-2019.

**IP. FP7-PEOPLE-2010-IEF.** *Quercus ilex* proteomics studies on the early seedling growth under drought stress. QUPROD. Grant Agreement N 271714. EU 7th Work program of the EU. SP3-People. Intra-European Fellowship. 2011-2013. 174,610 Euros.

## C.3. Participación en contratos de I+D+i de especial relevancia con empresas y/o administraciones (nacionales y/o internacionales). Only those related to the proposal in the last five years.

IP of different I+D+i contracts with different entities aimed at performing proteomics analysis of plant tissue samples:

1. Holm oak. Universidad de Valencia (Isabel Arrillaga). Ref. 12017236 and . Ref. 12017139 2017. 2400 Euros.
2. Pinus. Universidad de Oviedo (María J. Cañal). Ref. 12017138 and 39. 2017. 2911 and 3146 Euros
3. Carnation. Universidad Nacional de Colombia (Dr. H. Ardila). Ref. 12016191. 2017. 3357,5 Euros.
4. Arachis. EMBRAPA, Brasilia, Brasil (Dr. A. Mehta). Ref 12016136. 2016-2017. IP: Jesús V. Jorrín Novo. 1140,26 Euros.
5. Brassica. Universidad de Rennes, Francia (Prof. F. Cabello). Ref. 12016138. 569,99 Euros.
6. Pinus occidentalis. INTEC, Sto. Domingo, República Dominicana (Prof. Luis Rodríguez). Ref. 12016090/ 12015083 / 12015077. 2016-2018. 1275 and 1700 Euros.
7. Arachis. EMBRAPA, Brasilia, Brasil (Dr. A. Mehta). Ref 12016081. IP: Jesús V. Jorrín Novo. 2016-2018. 3099,92 Euros.

#### C.4. Patentes

Inventores: BUENO MA, SANCHEZ N, PINTOS B, NAVARRO R, JORRIN J.

Solicitantes: INIA (Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria) y UCO (Universidad de Córdoba). Título: Método de obtención de embriones haploides y plantas doble-haploides de encina. N. de solicitud de patente española: P200930686. Fecha de solicitud: 11/09/ 2009 Entidad titular: INIA-UCO. Países a los que se ha extendido: Portugal (Patente Nº de solicitud 105.287; Fecha de solicitud 11/10/2010)

**C.5. Participación como revisor en revistas científicas:** Amino Acids, Biotechnology and Molecular Biology Reviews, African Journal of Biotechnology, Biochimica et Biophysica Acta, BMC Genomics, BMC Plant Biology, Bosque, Canadian Journal of Microbiology, Crop and Pasture Science, Current Genomics, Current Proteomics, Electrophoresis, Environmental and Experimental Botany, Expert Review of Proteomics, FEBS Letters, Frontiers in Microbiology, Frontiers in Plant Sciences, Frontiers in Plant Proteomics, Functional Plant Biology, Fungal Biology, iForest, Interciencia, JIOMICS, Journal of Agricultural and Food Chemistry, Journal of Chromatography A, Journal of Experimental Botany, Journal of Heredity, Journal of Mass Spectrometry, Journal of Phytoremediation, Journal of Plant Growth Regulation, Journal of Plant Physiology, Journal of Plant Pathology, Journal of Proteome Research, Journal of Proteomics, Microorganisms, Molecular and Cellular Proteomics, New Biotechnology, Molecular Biology Report, Physiological and Molecular Plant Pathology, Phytochemistry, Plant Biology, Plant Molecular Biology Reporter, Plant Physiology and Biochemistry, Plant Science, Plant Biotechnology, Planta, Plos One, Proteomes, Proteomics, Science Asia, Silvae Genetica, Spanish Journal of Agricultural Research, Trees, Tree Physiology, Weed Research.

**C.6. Evaluacion de proyectos para diferentes agencias:** ERA-NET (EU), ANEP (España), FWO (Belgium), ANR (Francia), COLCIENCIAS (Colombia), SNF (Switzerland), BARD (Israel), APVV (Slovakia), INCITE (Xunta Galicia), AMSUD Pasteur Network, CSIC-Uruguay, Agencia para la Calidad Universitaria de Castilla y León, Czech Science Foundation, FONCYT (Argentina).

**C.7 Otros. Partcipación en otras actividades científicas.** Fundador de la Sociedad Española de Proteómica y la European Proteomics Association. Participación como organizador, miembro del comité organizador o científico: XIII Reunión de la SECIVTV, II Spanish Symposium on Physiology and Breeding of Cereals, INPPO 2018, Workshop UCO-CeA3 para investigadores, 11<sup>th</sup> International Congress on Plant Biotechnology and Agriculture. 6th Congress of the Spanish Proteomics Society. XIII Reunión de “Biología Molecular de Plantas”. Miembro del Comité Científico y Moderador de la Sesión Técnicas y Temas Emergentes. 10º Congreso Internacional de Biotecnología Vegetal, BioVeg 2015. “13th Human Proteome Organization Congress-HUPO 2014. 1st INPPO World Congress on Plant Proteomics: Methodology to Biology. 9º Congreso Internacional de Biotecnología Vegetal, BioVeg 2013. HUPO 2011 10th World Congress. COST FS0603 4th Congress of the Spanish Proteomics Society. 4th EuPA Scientific Meeting. XVIII reunión de la Sociedad Española de Fisiología Vegetal (SEFV) XI Congreso Hispano-Luso de Fisiología Vegetal. IUBMB Special Meeting on Plant Stresses/6th FASBMB Congress.

Detailed CV can be found at: <http://www.uco.es/probiveag/historia.html>