Fecha del CVA	25.01.2022

Parte A. DATOS PERSONALES

Nombre y apellidos	Jesús Valentín Jorrín Novo		
DNI/NIE/pasaporte		Edad	
Núm. identificación del investigador		Researcher ID	L-1656-2014
		Código Orcid	https://orcid.org/0000-0002-8778-3604

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		
Teléfono	(+34) 957218609	correo electrónico	bf1jonoj@uco.es
Categoría profesional	Catedrático de la Universidad de Córdoba	Fecha inicio	01.06.2012
Espec. cód. UNESCO	2415, 2417, 3101, 3108		
Palabras clave	Forest trees, Quercus, Holm oak, proteomics, -omics, systems biology, stresses, climate change, seed, secondary metabolism, phenolics, trazeability, population variability		

A.2. Formación académica

Licenciatura/Grado/Doctorado	Universidad	Año
Licenciatura en Ciencias Biológicas (Bioquímca 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**.** 162 items en Web of Science; 4056 citations (3358 eliminating self-citations); Referenced in 2686 publications (2562 eliminating self-citations), 25,04 citations per item. h index of 45

Research Gate. RG 43,46 (97,5%). 276 research items, 60759 reads, 6287 citations, 3228 research interest, h-index 46 (42 excluding self-citations).

36 years of continuous professional activity at the University; 7 positive academic evaluations (five year term each), six positive research evaluations (six years term each), and five positive research evaluations by, respectively the Spanish ANECA and the Andalucian ADEVA.

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.
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 31 doctoral theses, 5 more as Tutor, 18 Master's Theses and 34 Degree 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 33 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 Physiologia 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 23 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. I have recently moved into 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. After 15 years of working with “encina” the generated knowledge and optimized technology is being transferred to the productive sector through public and private organizations. They have now being used in selecting elite, resilient, genotypes, as an approach for breeding. The last, but no the less, is the analysis of “encina” acorns (bellota) for traceability studies and the identification of bioactive compounds, it related to the renewed interest in using the fruit as a nut or for nutritional purposes.

Parte C. MÉRITOS MÁS RELEVANTES

C.1. Publicaciones (fives last years)

GUERRERO-SÁNCHEZ, V.M.; LÓPEZ-HIDALGO, C.; REY, M.-D.; CASTILLEJO, M.Á.; JORRÍN-NOVO, J.V.; ESCANDÓN, M. Multiomic Data Integration in the Analysis of Drought-Responsive Mechanisms in Quercus ilex Seedlings. Plants 2022, 11, 3067. https://doi.org/10.3390/ plants11223067

ANA MARÍA MALDONADO-ALCONADA, MARÍA ÁNGELES CASTILLEJO, MARÍA-DOLORES REY, MÓNICA LABELLA-ORTEGA, MARTA TIENDA-PARRILLA, TAMARA HERNÁNDEZ-LAO, IRENE HONRUBIA-GÓMEZ, JAVIER RAMÍREZ-GARCÍA, VÍCTOR M. GUERRERO-SANCHEZ, CRISTINA LÓPEZ-HIDALGO, LUIS VALLEDOR, RAFAEL M. NAVARRO-CERRILLO, JESÚS V. JORRÍN-NOVO. 2022. Multiomics molecular research with the

recalcitrant and orphan Quercus ilex tree species: why, what for and how. International Journal of Molecular Sciences 23, 9980. https://doi.org/10.3390/ijms23179980.

DI SILVESTRE D, TADINI L, TROTTA A, VALLEDOR L, SALEKDEH GH, JORRIN NOVO JV. 2022. Editorial: A Systems View of Plant Cellular Communication. Front Plant Sci. 13:875046. doi: 10.3389/fpls.2022.875046.

MONICA ESCANDON, EZEQUIEL D. BIGATTON, VICTOR M. GUERRERO-SANCHEZ, TAMARA HERNANDEZ-LAO, MARÍA-DOLORES REY, JESUS V JORRIN NOVO, MARÍA ANGELES CASTILLEJO SANCHEZ. 2022. Identification of proteases and protease inhibitors in seeds of the recalcitrant forest tree species Quercus ilex. Frontiers in Plant Sciences 13: 907042. doi: 10.3389/fpls.2022.907042

BONOSO SAN-EUFRASIO, MARÍA ANGELES CASTILLEJO, MÓNICA LABELLA-ORTEGA, FRANCISCO J. RUIZ-GÓMEZ, RAFAEL M. NAVARRO-CERRILLO, MARTA TIENDA-PARRILLA, JESUS V JORRÍN-NOVO AND MARÍA-DOLORES REY. 2021. Effect and response of Quercus ilex subsp. ballota [Desf.] Samp. seedlings from three contrasting Andalusian populations to individual and combined Phytophthora cinnamomi and drought stresses. Frontiers in Plant Science 12:722802. doi: 10.3389/fpls.2021.722802.

VÍCTOR MANUEL GUERRERO-SÁNCHEZ, MARÍA ÁNGELES CASTILLEJO, CRISTINA LÓPEZ-HIDALGO, ANA MARÍA MALDONADO ALCONADA, JESÚS VALENTÍN JORRÍN-NOVO, MARÍA-DOLORES REY. 2021. Changes in the transcript and protein profiles of Quercus ilex seedlings in response to drought stress. Journal of Proteomics 243, 104263.

JOSÉ VALERO GALVÁN, RAQUEL GONZÁLEZ FERNÁNDEZ, JESUS V. JORRIN-NOVO. 2021. Variation between the American Quercus virginiana and Mediterranean Quercus Species in Terms of Seed Nutritional Composition, Phytochemical Content, and Antioxidant Activity. Molecules 26, 2351. https://doi.org/ 10.3390/molecules26082351.

MARIA TARTAGLIA, ROSARIA SCIARRILLO, DANIELA ZUZOLO, ANGELA AMORESANO, ANNA ILLIANO, JESÚS JORRÍN-NOVO, CARMINE GUARINO. 2021. Why consumers prefer green Friariello Pepper: Changes in the protein and metabolite profiles along the ripening. Frontiers in Plant Sciences, 12: 668562. doi: 10.3389/fpls.2021.668562

JESUS V. JORRIN NOVO. 2021. Proteomics and plant biology: contributions to date and a look towards the next decade. Expert Review of Proteomics 18, 93-103. DOI: 10.1080/14789450.2021.1910028

ANTONIO RAFAEL SÁNCHEZ-RODRÍGUEZ, MARÍA-DOLORES REY, HASNA NECHATE-DRIF, MARÍA ÁNGELES CASTILLEJO, JESÚS V. JORRÍN-NOVO, JOSÉ TORRENT, MARÍA CARMEN DEL CAMPILLO, DANIEL SACRISTÁN. 2021. Combining P and Zn fertilization to enhance yield and grain quality in maize grown on Mediterranean soils. Scientific Reports, 11:7427 | https://doi.org/10.1038/s41598-021-86766-2.

BONOSO SAN-EUFRASIO, EZEQUIEL DARÍO BIGATTON, VICTOR M. GUERRERO-SÁNCHEZ, PALAK CHATURVEDI, JESÚS V. JORRÍN-NOVO, MARÍA-DOLORES REY, MARÍA ÁNGELES CASTILLEJO. 2021. Proteomics Data Analysis for the Identification of Proteins and Derived Proteotypic Peptides of Potential Use as Putative Drought Tolerance Markers for *Quercus ilex. Int. J. Mol. Sci.* **2021**, *22*, 3191. https://doi.org/10.3390/ ijms22063191

MÓNICA ESCANDÓN, MARÍA ÁNGELES CASTILLEJO, JESÚS V. JORRÍN-NOVO, MARÍA-DOLORES REY. 2021. Molecular research of stress responses in Quercus spp.: from classical biochemistry to Systems Biology through -omics análisis. Forest 12, 364. https://doi.org/10.3390/f12030364

CAROLINA JUNCÁ MORALES, LUIS ENRIQUE RODRÍGUEZ DE FRANCISCO, CRISTINA LÓPEZ-HIDALGO, RAFAEL M NAVARRO CERRILLO, OMAR PAÍNO PERDOMO, JESÚS VALENTÍN JORRÍN NOVO. 2021. Endemic *Juniperus gracilior* varieties of the Hispaniola island, tree taxa of environmental and economic relevance and a valuable phytochemical source. BOSQUE 42: 7-22, 2021 DOI: 10.4067/S0717-92002021000100007

KOMATSU, S.; JORRIN-NOVO, J.V. 2021. Plant Proteomic Research 3.0: Challenges and Perspectives. Int. J. Mol. Sci. 22, 766. https:// doi.org/10.3390/ijms22020766

MUHITTIN KULAK, JESÚS V. JORRÍN-NOVO; MARIA CRISTINA ROMERO-RODRIGUEZ; EMEL DIRAZ-YILDIRIM; FATIH GUL; SENGUL KARAMAN. 2020. Effect of seed priming with salicylic acid on plant growth, yield, physiological parameters, nutrient uptake, and essential oil composition in basil (Ocimum basilicum L.) plants grown under water stress conditions. Industrial Crops and Products 161, 113235. https://doi.org/10.1016/j.indcrop.2020.113235.

MONICA ESCANDON, JESÚS V. JORRÍN-NOVO, MARÍA ANGELES CASTILLEJO. 2021. Application and optimization of label-free shotgun approaches in the study of *Quercus ilex*. Journal of Proteomics 233 (2021) 104082. . https://doi.org/10.1016/j.jprot.2020.104082.

BESMA SGHAIER-HAMMAMI, MARÍA ANGELES CASTILLEJO, NARJES BAAZAOUI, JESÚS V. JORRÍN-NOVO, MONICA ESCANDON. 2021. GeLC-Orbitrap/MS and 2-DE-MALDI-TOF/TOF comparative proteomics analysis of seed cotyledons from the non-orthodox *Quercus ilex* tree species . Journal of Proteomics 233 . https://doi.org/10.1016/j.jprot.2020.104087.

CRISTINA LÓPEZ-HIDALGO, MACEDONIA TRIGUEROS, MACARENA MENÉNDEZ, JESÚS V. JORRIN-NOVO. 2021. Phytochemical composition and variability in Quercus ilex acorn morphotypes as determined by NIRS and MS-based approaches. Food Chemistry 338 (2021) 127803

JORRIN NOVO et al. (Eds.) 2020. Plant Proteomics: Methods and Protocols, 3rd edition. In Springer Nature Methods in Molecular Biology. ISSN 1064-3745. https://doi.org/10.1007/978-1-0716-0528-8.

KOMATSU and JORRIN NOVO (Eds.). 2020 Plant Proteomics 3.0. International Journal of Molecular Sciences. https://www.mdpi.com/journal/ijms/special_issues/plant-proteomic_3

SAN EUFRASIO et al. 2020. Responses and Differences in Tolerance to Water Shortage under Climatic Dryness Conditions in Seedlings from Quercus spp. and Andalusian Q. ilex Populations. Forests 11, 707; doi:10.3390/f11060707.

PEDROSA et al. 2020. Quercus ilex pollen allergen, Que i 1, responsible for pollen food allergy syndrome caused by fruits in Spanish allergic patients. Clin Exp Allergy. 50:815–823.

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.

GUERRERO-SANCHEZ et al. 2019. Ion Torrent and lllumina, 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.

ROMERO RODRIGUEZ et al. 2017. Germination and early seedling development in Quercus ilex recalcitrant seeds: transcriptional, hormonal, and sugar profiling. Front. Plant Sci. 9:1508.

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.

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.

FERNANDEZ I MARTI 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

C.2. Proyectos en los que he participado (last 5 years). Se incluyen solo aquellos relacionados con la solicitud.

MEJORA DE LA ENCINA (QUERCUS ILEX) Y SELECCIÓN DE GENOTIPOS ÉLITES RESILIENTES A LA SECA, CAMBIO CLIMÁTICO Y PARA SU USO EN ALIMENTACIÓN HUMANA UTILIZANDO UNA APROXIMACIÓN GENÓMICA Y METABOLÓMICA. Ayudas a Proyectos de Excelencia, Plan Andaluz de investigación, Desarrollo e Innovación (PAIDI 2020). Convocatoria 2021. **IP:** Mari AngelesCastillejo Sanchez **Co-IP**: Mª Dolores Rey Santome. 2023-2025. 142 000 Euros

SELECCION ASISTIDA POR MARCADORES MOLECULARES DE GENOTIPOS ELITE Y TRATAMIENTO CON ACTIVADORES DE DEFENSA: DOS APROXIMACIONES BIOTECNOLOGICAS AL PROBLEMA DE LA SECA EN ENCINA. PID2019-109038RB-I00. Proyectos de I+D+i», en el marco de los Programas Estatales de Generación de Conocimiento y Fortalecimiento Científico y Tecnológico del Sistema de I+D+i y de I+D+i O rientada a los Retos de la Sociedad, del Plan Estatal de Investigación Científica y Técnica y de Innovación 2017-2020.
IP: Jesus V. Jorrin Novo; Co-IP: Mari Angeles Castillejo Sanchez. 178 000 Euros. Junio 2020-Mayo 2023.
PROGRAMA NACIONAL DE MEJORA Y CONSERVACIÓN DE LOS RECURSOS GENÉTICOS DE LA ENCINA Y EL ALCORNOQUE FRENTE AL SÍNDROME DE *LA SECA.* Subgrupo 2, "Mejora genética y fisiológica". Ministerio de Agricultura, Pesca y Alimentación (Área de Recursos Genéticos Forestales - Subdirección General de Política Forestal). **IP:** TRAGSA. Participante junto con otras 14 instituciones. 2.299.976,95 € . 2020-2024

LA SECUENCIACIÓN DEL GENOMA DE LA ENCINA (*QUERCUS ILEX*) Y LA BÚSQUEDA DE GENES DE RESPUESTA A ESTRESES ASOCIADOS AL SÍNDROME DE LA SECA: CARACTERIZACIÓN ESTRUCTURAL Y FUNCIONAL. 1257595. Junta de Andalucía, Convocatoria de ayudas de proyectos I+D+i, en el marco del Programa Operativo FEDER Andalucía 2014-2020. Modalidad B (Investigadores emergentes). **IP:** María Dolores Rey Santome, Co-IP (Tutor) Jesús V. Jorrín Novo. **40**000 Euros. 2020-2021

ESTUDIOS DE VARIABILIDAD POBLACIONAL Y RESPUESTA A ESTRESES EN ENCINA MEDIANTE UNA APROXIMACIÓN MULTI-ÓMICA (TRANSCRIPTÓMICA, PROTEÓMICA Y METABOLÓMICA. Proyectos EXCELENCIA y Proyectos RETOS Dirección General de Investigación Científica y Técnica Subdirección General de Proyectos de Investigación**.** 2016-2018. 150.000 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: ABB-Sinica, Acta Physiologiae Plantarum, ACS Omega, African Journal of Biotechnology, Amino Acids, Biotechnology and Molecular Biology Reviews, African Journal of Biotechnology, Beverages, Biochimica et Biophysica Acta, Biomolecules, BMC Genomics, BMC Plant Biology, Bosque, Cell Research (China), Canadian Journal of Microbiology, Crop and Pasture Science, Current Genomics, Current Proteomics, Electrophoresis, Environmental and Experimental Botany, Expert Review of Proteomcis, FEBS Letters, Food, Fronters in Microbiology, Frontiers in Plant Sciences, Frontiers in Plant Proteomics, Functional Plant Biology, Fungal Biology, Horticulture Research, Interciencia, iForest, Interciencia, International Journal of Molecular Sciences, 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, MDPI, Microorganisms, Molecular and Cellular Proteomics, New Biotechnology, Molecular Biology Report, Physiologia Plantarum, Physiological and Molecular Plant Pathology, Phytochemistry, Plant Biology, Plant Journal, Plant Molecular Biology Reporter, Plant Physiology and Biochemistry, Plant Science, Plant Biotechnology, Plant Gene, Planta, Plants, Plos One, Proteomes, Proteomics, Science Asia, Scientific Data, Silvae Genetica, Spanish Journal of Agricultural Research, Trees, Tree Physiology, Trends in Plant Sciences, 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), .