

Part A. PERSONAL INFORMATION

		CV date	07/06/2023
First name	JUAN JOSÉ		
Family name	GARRIDO PAVÓN		
ID number			
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Open Researcher and Contributor ID (ORCID) (*)	0000-0001-6592-2231		

Current position

Position	PROFESOR TITULAR		
Initial date	4/8/2010		
Institution	UNIVERSIDAD DE CÓRDOBA		
Department/Center	GENETICS		

Part B. CV SUMMARY

Ph.D. in Biological Sciences. Postdoctoral stays at the University of Glasgow (Department of Veterinary Medicine, Glasgow Veterinary School, United Kingdom), Institute National de la Recherche Agronomique (INRA, UMR 0314 LREG Radiobiologie et Etude du Génome. Centre de recherche de Jouy-en-Josas, France) and Animal Health Research Center (CISA- INIA, Madrid, Spain). Awarded in the first call of the Ramón y Cajal Research Program. Since 2010, Associated Professor at the Department of Genetics of the University of Córdoba with six periods of 6 years of research work (sexenios) recognized by the National Committee for the Assessment of the Research Action (CNEAI). Secretary of the Department of Genetics and member of the board of the Faculty of Veterinary Science. Member of the Bioethics Committee and the Technical Evaluation Committee of the University of Córdoba. Coordinator of the Animal Biotechnology cluster in the International Campus of Excellence CeIA3, founding member of the National Research Network in Animal Health (RISA), and delegate member of the University of Córdoba in the Andalusian COVID-19 Surveillance Network. Principal investigator of two research groups, AGR231 Genomics and Animal Biotechnology (Andalusian Research Program) and GA14 Immunogenomics and Molecular Pathogenesis (Maimonides Biomedical Research Institute of Córdoba, IMIBIC), and coordinator of the UCOVID-19 group, authorized by the Instituto de Salud Carlos III for molecular diagnosis of SARS-CoV-2 in biological samples. Principal investigator of seven (7) National R&D Program Research Projects and an Integrated Action in Genomics and Proteomics financed by the Ministry of Science and Technology. Partner in several projects of the VI and VII Framework Program for Research of the European Union, such as EADGENE European Network of Excellence and SABRE Integrated Project, pioneers in the application of genomic tools to the study of infectious diseases in domestic animals, and the COST actions “Farm Animal Proteomics” and “PIGUTNET: European network on the factors affecting the gastro-intestinal microbial balance and the impact on the health status of pigs”. Author of more than 80 scientific publications and a patent registered in Europe and the United States. Supervisor of 9 doctoral theses in the last 10 years, 17 undergraduate theses (*Proyectos Fin de Grado*) and 16 master theses (*Proyectos Fin de Máster*). Participant in 6 technology transfer contracts and founding member of BIOVET-UCO, the first spin-off company of the University of Córdoba. Member of the Spanish Society of Genetics and the International Society for Animal Genetics (ISAG). Member of the ANEP evaluation panel, reviewer of Scientific Report, PLoSOne, Proteomics, Journal of Proteomics, Genetics, Selection & Evolution, Gene, Viral Immunology, Clinical and Vaccine Immunology, Cytokine, Applied Biochemistry & Biotechnology, etc. Associate editor of BMC Veterinary Research and Journal manager of Frontiers in Immunology and Frontiers in Microbiology.

Quality indicators of scientific research: H-index: 20. Number of Publications (last 10 years): 35 (29 Q1). Cited publications (last 5 years): 87%. Open access publications (from 2019): 56%. Normalized impact: 2.332.

Part C. RELEVANT MERITS (last 10 years)

C.1. Publications

1. Martins RP, Aguilar C, Graham JE, Carvajal A, Bautista R, Claros MG, **Garrido JJ**. 2013. Pyroptosis and adaptive immunity mechanisms are promptly engendered in mesenteric lymph-nodes during pig infections with *Salmonella enterica* serovar Typhimurium. *Veterinary Research* 44:120.
2. Collado-Romero M, Aguilar C, Arce C, Lucena C, Codrea MC, Morera L, Bendixen E, Moreno Á, **Garrido JJ**. 2015. Quantitative proteomics and bioinformatic analysis provide new insight into the dynamic response of porcine intestine to *Salmonella* Typhimurium. *Frontiers in Cellular and Infection Microbiology* 5: 64.
3. Uribe JH, Collado-Romero M, Zaldívar-López S, Arce C, Bautista R, Carvajal A, Cirera S, Claros MG, **Garrido JJ**. 2016. Transcriptional analysis of porcine intestinal mucosa infected with *Salmonella* Typhimurium revealed a massive inflammatory response and disruption of bile acid absorption in ileum. *Veterinary Research* 47:11.
4. Ayllón N, Jiménez-Marín Á, Argüello H, Zaldívar-López S, Villar M, Aguilar C, Moreno A, De La Fuente J, **Garrido JJ**. 2017. Comparative Proteomics Reveals Differences in Host-Pathogen Interaction between Infectious and Commensal Relationship with *Campylobacter jejuni*. *Frontiers in Cellular and Infection Microbiology* 7: 145.
5. Herrera-Uribe J, Zaldívar-López S, Aguilar C, Luque C, Bautista R, Carvajal A, Claros MG, **Garrido JJ**. 2018. Regulatory role of microRNA in mesenteric lymph nodes after *Salmonella* Typhimurium infection. *Veterinary Research* 1; 49(1): 9.
6. Argüello H, Estellé J, Zaldívar-López S, Jiménez-Marín Á, Carvajal A, López-Bascón MA, Crispie F, O'Sullivan O, Cotter PD, Priego-Capote F, Morera L, **Garrido JJ**. 2018. Early *Salmonella* Typhimurium infection in pigs disrupts Microbiome composition and functionality principally at the ileum mucosa. *Scientific Reports* 17;8(1):7788.
7. Bellido-Carreras N, Argüello H, Zaldívar-López S, Jiménez-Marín Á, Martins RP, Arce C, Morera L, Carvajal A, **Garrido JJ**. 2019. *Salmonella* Typhimurium infection along the porcine gastrointestinal tract and associated lymphoid tissues. *Veterinary Pathology* 19: 56(5):681-690.
8. Aguilar C, Cruz AR, Rodrigues Lopes I, Maudet C, Sunkavalli U, Silva RJ, Sharan M, Lisowski C, Zaldívar-López S, **Garrido JJ**, Giacca M, Mano M, Eulalio A. 2020. Functional screenings reveal different requirements for host microRNAs in *Salmonella* and *Shigella* infection. *Nature Microbiology* 5(1): 192-205.
9. Aguilar C, Costa S, Maudet C, Vivek-Ananth RP, Zaldívar-López S, **Garrido JJ**, Samal A, Mano M, Eulalio A. 2021. Reprogramming of microRNA expression via E2F1 downregulation promotes *Salmonella* infection both in infected and bystander cells. *Nature Communication* 12(1): 3392.
10. Zaldívar-López S, Herrera-Uribe J, Bautista R, Jiménez Á, Moreno Á, Claros MG, **Garrido JJ**. 2023. *Salmonella* Typhimurium induces genome-wide expression and phosphorylation changes that modulate immune response, intracellular survival and vesicle transport in infected neutrophils. *Dev Comp Immunol*. 140:104597.

C.2. Congress

1. J Herrera-Uribe; S Zaldívar-López; R Bautista, MG Claros, A Carvajal, L Morera, **JJ Garrido**. Expression profiling analysis of the pig intestinal microRNA response to *Salmonella enterica* serovar Typhimurium. 5th European Veterinary Immunology Workshop (EVIW), satellite meeting of the 4th European Congress of Immunology (ECI), 2-4 September 2015, Vienna, Austria. Oral presentation.
2. S Zaldívar-López; R Bautista; J Herrera-Uribe, N Serrano, Á Jiménez-Marín, MG Claros, C Lucena, **JJ Garrido**. Study of the interaction between *Salmonella* and porcine neutrophils using a simultaneous RNA sequencing strategy (dual-RNAseq). XL Congreso De la Sociedad Española de Genética, 16-18 September 2015. Oral presentation.
3. J Herrera-Uribe, S Zaldívar-López, C Aguilar, C Luque, R Bautista, A Carvajal, MG Claros, **JJ Garrido**. Regulatory role of microRNAs in mesenteric lymph nodes after *Salmonella* Typhimurium Infection. EMBO/EMBL Symposium The Non-Coding Genome, 9-15 September 2017, Heidelberg, Germany. Poster.
4. Herrera-Uribe, S Zaldívar-López, C Aguilar, C Luque, R Bautista, A Carvajal, MG Claros, **JJ Garrido**. miR-194 regulates TLR4-mediated inflammatory response in *Salmonella* Typhimurium infected porcine ileum. EMBO/EMBL Symposium The Non-Coding Genome, 9-15 September 2017, Heidelberg, Germany. Poster.

5. N. Bellido-Carreras, S. Zaldívar-López, H. Argüello, R. Bautista, A. Jiménez-Marín, MG Claros, **JJ Garrido**. Simultaneous transcriptional profiling of *Salmonella* Typhimurium and its porcine intestinal epithelial host cell reveals insights into host-pathogen interaction. 6th European Veterinary Immunology Workshop (EVIW), satellite meeting of the 5th European Congress of Immunology (ECI), 5-7 September 2018, Utrecht, The Netherlands, Poster.
6. H. Arguello, J. Estelle, S. Zaldívar-López, Jiménez-Marín Á, Carvajal A, López-Bascón MA, Crispie F, O'Sullivan O, Cotter PD, Priego-Capote F, Morera L, **Garrido JJ**. Metagenomic and metabolomic changes in *Salmonella* Typhimurium infection in pigs. 6th European Veterinary Immunology Workshop EVIW, satellite meeting of the 5th European Congress of Immunology (ECI), 5-7 September 2018, Utrecht, The Netherlands. Oral presentation.
7. Sara Zaldívar-López, Juber Herrera-Urbe, Rocío Bautista, A. Jiménez-Marín, A. Moreno, H. Arguello, MG Claros, **JJ Garrido**. Phosphoproteomic analysis reveals that *Salmonella* Typhimurium increases neutrophil survival after infection and decreases their immune response capacity. XII European Proteomic Association (EUPA) Congress and 7th Congress of the Spanish Proteomic Society, 16-20 June 2018, Santiago de Compostela, Spain. Poster.
8. S. Zaldívar-López, J. Herrera-Urbe, R. Bautista, A. Jiménez-Marín, A. Moreno, MG Claros, **JJ Garrido**. *Salmonella* Typhimurium induces genome-wide expression and phosphorylation changes that modulate immune response, survival, and vesicle transport in porcine infected neutrophils. 37th International Society for Animal Genetics Conference, 7-12 July, Lleida, Spain. Poster.
9. N. Bellido-Carreras, S. Zaldívar-López, H. Argüello, R. Bautista, MG Claros, **JJ Garrido**. Gene expression reveals the role of autophagy in *Salmonella* Typhimurium replication during intestinal epithelial cells infection. 37th International Society for Animal Genetics Conference, 7-12 July, Lleida, Spain. Poster.
10. R. Gresse, E. Forano, S. Denis, **JJ Garrido**, A. Jiménez-Marín, M. Beaumont, T. van de Wiele, F. Chaucheyras-Durand, S. Blanquet-Diot. Evaluation of a probiotic strategy to fight against ETEC infections in an in vitro model of weaning piglets coupled with porcine cell lines. 8th Beneficial Microbes Conference – pre and probiotics for lifelong human and animal health, 22-24 Mars 2021, Amsterdam, Netherland. Oral conference.

C.3. Research projects

1. **AGL2008-00400**. Genetic resistance to the disease in pigs (II). Genomic of the host-pathogen interaction and identification of candidate genes involved in the response to *Salmonella* infection. National R&D Program. Ministry of Science and Technology. **Principal investigator: Juan José Garrido Pavón**. Period: 1-12-2009 to 31-12-2011. Budget: 177.810 Euros.
2. **CEE-FP7-KBBE-2010-4**. Strengthening the implementation of durable integration of EADGENE. CEE, VII Framework. **Principal investigator: Juan José Garrido Pavón**. Period: 1-9-2010 to 1-8-2013. Budget: 81.085 Euros.
3. **AGL2011-28904**. Integrated immunogenomics in the pig: deciphering the molecular response to *Salmonella* infection in the porcine intestine to identify disease resistance genes. National R&D Program. Ministry of Science and Technology. **Principal investigator: Juan J. Garrido Pavón**. Period: 1-1-2012 to 31-12-2014. Budget 180.290 Euros.
4. **AGL2014-54089-R**. Host-pathogen interaction on porcine salmonellosis. Modulatory effects of bacterial factors on the intestinal immune response and persistence mechanisms. National R&D Program. Ministry of Economy and Competitiveness. **Principal investigator: Juan J. Garrido Pavón**. Period: 1-1-2015 to 31-12-2017. Budget: 150.000 Euros.
5. **AGL2017-87415-R**. Analyzing the interplay between pathogen, intestinal microbiota and host immunity to understand the mechanisms that regulate colonization and clearance of *Salmonella* in the porcine gut. National R&D Program. Ministry of Science, Innovation and Universities. Principal investigator: Juan J. Garrido Pavón. Period: 1-1-2018 to 31-12-2020 (extended to 31-8-2021). Budget: 181.500 Euros.
6. **Teagasc Walsh Fellowships**. Strategies to face the removal of therapeutic ZnO from pig diets. República de Irlanda. **Principal investigators: Juan José Garrido Pavón /Edgar García Manzanilla**. Period: 1-1-2018 al 31-12-20. Budget: 86.000 Euros.
7. **CV20-20089**. Inflammation viral determinants in the cytokine storm within COVID19 (INFLACOVID-2). Junta de Andalucía. Call for Research Projects on SARS-CoV-2 and Covid-19. **Principal investigator Juan José Garrido Pavón**. Period: 1-1-2021 to 31-12-2021. Budget: 80.000 Euros.

8. **1380897-R.** Inflammation y disbiosis. Estudio del impacto de la infección por Salmonella Typhimurium en la composición y funcionalidad del microbioma intestinal porcino. Junta de Andalucía FEDER-UCO. **Principal investigator Juan José Garrido Pavón.** Period: 1-1-2022 to 31-12-2022. Budget: 34.871 Euros.

C.3. Contracts, technological or transfer merits

C.3.1. Contracts.

1. Stem Cells: procurement, expansion, and characterization of stem cells from adult tissues. Company: NEWBIOTECHNIC (NBT). Period: 1-1-2012 to 31-12-2015. **Principal investigator: Juan José Garrido Pavón/Diego Llanes Ruiz.** Budget: 104.430 Euros.
2. Evaluation of the anti-inflammatory activity of plant extracts. Company: PROBENA, SL. Period: 15-11-2016 to 15-11-2017. **Principal investigator: Juan José Garrido Pavón.** Budget: 2.135,35 Euros.
3. Detection of SARS-CoV-2 virus in the wastewater of Córdoba's sewage network as an early indicator of COVID-19 propagation. EMACSA, Municipal Water Company of Córdoba. From 1-9-2020 to 31-8-2023. **Principal investigator: Juan José Garrido Pavón.** Budget: 370.000 Euros.

C.3.2 Patents.

Juan José Garrido Pavón, Diego Llanes Ruiz, Manuel Barbancho Medina, Ángeles Jiménez Marín. P9902193 (NATIONAL) PCT/ES00/00374 (INTERNATIONAL). Porcine protein CD29, nucleic acid that codes for this protein, and its applications. European countries and United States. 21.05.02. University of Córdoba.

C.3.3. Spin-off

Juan José Garrido Pavón is a founding researcher of the spin-off BioVet-UCO S.L (<http://biovet-uco.com/>), a company created in 1995 with the participation of the University of Córdoba and specialized in the production of monoclonal antibodies for use therapeutic.