

## Part A. PERSONAL INFORMATION

CV date

26/10/2022

First and Family name	ALFONSO CARBONERO MARTÍNEZ		
Social Security, Passport, ID number	██████████	Age	●
Researcher numbers	Researcher ID	N-7375-2014	
	ORCID code	0000-0002-0569-87	
	Scopus author	25321066400	

### A.1. Current position

Name of University/Institution	UNIVERSITY OF CORDOBA		
Department	ANIMAL HEALTH		
Address and Country	Campus Rabanales s/n. Edif. Sanidad Animal. Crta. Madrid-Cádiz km. 396A, 14014, Córdoba		
Phone number	+34 957218725	E-mail	<a href="mailto:Salcamaa@uco.es">Salcamaa@uco.es</a>
Current position	Full University Professor	From	2016
UNESCO codes	240111 (Animal Pathology), 241404 (Bacteriology), 310905 (Microbiology), 310907 (Pathology), 310911 (Virology)		
Keywords	Campylobacter, Epidemiology, Microbiology, Risk Factors		

### A.2. Education

Graduate / PhD	University	Year
Veterinary Graduate	Córdoba	1999
Advanced studies certificate	Córdoba	2002
PhD in Veterinary Sciences	Córdoba	2004

### A.3. JCR articles, h Index, thesis supervised

Number of published papers 75 (Source: Google Scholar)

Number of published papers indexed in JCR: 40

Number of Doctoral Thesis and Master Thesis in the last 10 years: 4 Doctoral Thesis and 4 Master Thesis

Total number of citations: > 770 (Source: Google Scholar)

Average citations/year: 91,4 (5 last years; Source: Google Scholar)

Total publications 1st quartile journals (Q1): 21

H-index: 16 (Source: Google Scholar)

## Part B. CV SUMMARY

I obtained my Degree in Veterinary Sciences in 1999, with a mark of 9.2/10, achieving the extraordinary award of the University of Cordoba. I finished my doctorate in 2004, with the thesis entitle “Epidemiological study of Bovine Respiratory disease in claves from dairy farms in Central Argentina”.

I am the author of 64 publications, 40 of which are in journals indexed in JCR. Twenty one of the JCR publications are in journals in the first quartile. All the studies were performed in the field of Infectious Diseases and Epidemiology. I have participated in 28 research projects and contracts. In three of the contracts I have been the principal investigator. The funds for these three contracts were 175,542.96 euros. I have authored more than 75 communications in national and international conferences. The main lines of research in which I have worked are: infections by zoonotic agents (Salmonella and Campylobacter), diseases in free-living animals (myxomatosis and haemorrhagic disease in wild rabbit; bluetongue in wild ruminants and sarcoptic mange in wild goat) and epidemiology of respiratory and reproductive disorders in cattle. I have directed 4 doctoral theses, 4 Master's thesis and 5 Degree thesis. I have performed stays related to research in Córdoba and Santa

Fé (Argentina), Madrid (Spain) and Loja (Ecuador). I currently have two six-years research periods, the last corresponding to the 2010-2015, and one six years transfer period.

Regarding the docent activity, I have taught more than 2,500 hours in 17 years as professor, mainly at the University of Córdoba, in the next subjects of the Degree in Veterinary: Infectious Diseases and Epidemiology. I have also been professor for more than 10 years in the Master of Medicine, Health and Animal Improvement, in the subject named "Risk factors and epidemiological models in animal health" and one year in the master Veterinary Public Health, teaching "Advanced Epidemiology". I have also taught at the Catholic University of Córdoba (Argentina), at the University of Zulia (Venezuela), at the University of Concepción (Chile) and at the Particular Technical University of Loja (Ecuador). Likewise, I participated 5 times in the Erasmus program, carried out teaching tasks at the University of Veterinary Sciences of Kosice (Slovakia), at the University of Life Sciences in Lublin (Poland), at the University of Helsinki (Finland), at the University of Messina (Italy), at the University of Iasi (Romania) and at the Freie University of Berlin (Germany).

Regarding the management activity, I have been part of the organizing committee of several national and international Congresses, I have been a member for six years of the University Senate and for four years of the Veterinary Faculty Board. In addition, I have been a union representative of the professors hired for eight years, and member of the Quality Assurance Unit of the Master in Medicine, Health and Animal Improvement for 10 years, having been in some periods Secretary and President. I participated in the Commission that prepared the self-report through the Faculty of Veterinary Medicine of the University of Córdoba achieved the first positive evaluation by the European Association of Veterinary Education Establishments (EAEVE) for two times (2010 and 2020). I also have participated for four years in the Postgraduate and Teaching Innovation Commission of the University of Cordoba. I was Coordinator of the Degree in Veterinary, Secretary of the Quality Assurance Unit of the Degree in Veterinary Medicine and responsible for the Tutorial Action Plan of this Degree for two years (2018-2020).

## **Part C. RELEVANT MERITS**

### **C.1. Publications (last 6 years)**

Publication in scientific journal. Giráldez-Pérez RM, Grueso EM, Jiménez-Aguayo R, Carbonero A, González-Bravo M, Kuliszewska E, Prado-Gotor R. Use of Nanoparticles to Prevent Resistance to Antibiotics-Synthesis and Characterization of Gold Nanosystems Based on Tetracycline. *Pharmaceutics*. 2022 Sep 14;14(9):1941. doi: 10.3390/pharmaceutics14091941. PMID: 36145689; PMCID: PMC9500715.

Publication in scientific journal. Carbonero A, Maldonado-Iniesta A, Trujillo Y, Perea J, Riofrío M, García-Bocanegra I, Borge C. Identification of genes associated with environmental persistence in *Campylobacter jejuni* and *Campylobacter coli* isolates from processing in a broiler abattoir. *Vet Res Commun*. 2022 Sep 12. doi: 10.1007/s11259-022-09981-w. Epub ahead of print. PMID: 36094751.

Publication in scientific journal. Arenas A, Borge C, Carbonero A, García-Bocanegra I, Cano-Terriza D, Caballero J, Arenas-Montes A. Bovine Coronavirus Immune Milk Against COVID-19. *Front Immunol*. 2021 Mar 23;12:637152. doi: 10.3389/fimmu.2021.637152. PMID: 33833758; PMCID: PMC8021920.

Publication in scientific journal. Borie-Polanco C, Galarce-Gálvez N, Yévenes-Coa K, Yáñez-López JM, Robeson-Camus J, Carbonero-Martínez A. 2021. Reducing *Salmonella enterica* serovar Enteritidis contamination in food: lytic bacteriophage cocktail in homemade mayonnaise. *Rev Colomb Cienc Pecu*; 34(3).

Publication in scientific journal. Saa LR, Guzmán LT, Fierro NC, Castro LM, Reyes-Bueno F, Carbonero A. 2021. Seroprevalence and risk factors associated with bovine leukemia virus seropositivity in cattle herds from Ecuador. *Rev Colomb Cienc Pecu* 34; 34(3).

Publication in scientific journal. Cuevas, I., Carbonero, A., Cano, D. et al. 2020. Antimicrobial resistance of *Pasteurella multocida* type B isolates associated with acute septicemia in pigs and cattle in Spain. *BMC Vet Res* 16, 222.

Publication in scientific journal. Cuevas I, Carbonero A, Cano D, Pacheco IL, Marín JC, Borge C. 2020. First outbreak of bovine haemorrhagic septicaemia caused by *Pasteurella multocida* type B in Spain - Short communication. *Acta Vet Hung*. May 8;68(1):8-11.

- Publication in scientific journal. Mazurek Ł, Carbonero A, Skrzypczak M, Winiarczyk S, Adaszek Ł. 2020. Epizootic Situation of Feline Bartonella Infection in Eastern Poland. J Vet Res. 8;64(1):79-83.
- Book chapter. Borge, C., Arenas, A., Carbonero, A. 2019. Foot and Mouth Disease. In: García-Bocanegra, I. and Zafra, R. (Eds). Infectious Diseases in Ruminants. Elvevier, Barcelona, Spain. Pp. 12-20.
- Book chapter. Carbonero, A., Borge, C., Arenas, A. 2019. Anthrax. In: García-Bocanegra, I. and Zafra, R. (Eds). Infectious Diseases in Ruminants. Elvevier, Barcelona, Spain. Pp. 45-50.
- Book chapter. Carbonero, A., Cano, D., Arenas, A., Borge, C. 2019. Infectious Bovine Rhinotracheitis. In: García-Bocanegra, I. and Zafra, R. (Eds). Infectious Diseases in Ruminants. Elvevier, Barcelona, Spain. Pp. 62-70.
- Book chapter. Borge, C., Cuevas, I., Arenas, A., Carbonero, A. 2019. Pasteurellosis. Bovine Hemorrhagic Septicemia. In: García-Bocanegra, I. and Zafra, R. (Eds). Infectious Diseases in Ruminants. Elvevier, Barcelona, Spain. Pp. 71-82.
- Book chapter. Martínez-Padilla, A.B., Carbonero, A., Caballero, J., Cano, C. 2019. Pasteurellosis. Neurotoxic and histotoxic Clostridia. In: García-Bocanegra, I. and Zafra, R. (Eds). Infectious Diseases in Ruminants. Elvevier, Barcelona, Spain. Pp. 366-373.
- Publication in scientific journal. Carbonero-Martínez, A.; Guzmán, L.T.; García-Bocanegra, I.; Borge-Rodríguez, C.; Adaszek, L.; Arenas-Casas, A.J.; Saa, L.R. 2018. Seroprevalence and risk factors associated with Brucella seropositivity in dairy and mixed cattle herds from Ecuador. Trop Anim Health Prod. 50, pp. 197-203.
- Publication in scientific journal. Jurado-tarifa, E.; Torralbo-Montoro, A.; Borge-Rodríguez, C.; Cerdá-Cuellar, M.; Ayats, T.; Carbonero-Martínez, A.; García-Bocanegra, I. 2016. Genetic diversity and antimicrobial resistance of Campylobacter and Salmonella strains isolated from decoys and raptors. Comp Immunol Microbiol Infect Dis. 48, pp. 14-21.
- Publication in scientific journal. Paniagua, J.; García-Bocanegra, I.; Arenas-Montes, A.; Berriatua, E.; Espunyes, J.; Carbonero, A.; Rosell, R.; Marco, I.; Cabezón, O. 2016. Absence of circulation of Pestivirus between wild and domestic ruminants in southern Spain. Vet Rec. 178(9), pp. 215-219.
- Publication in scientific journal. Arenas-Montes, A.J.; Paniagua, J.; Arenas-Casas, A.J.; Lorca-Oró, C.; Carbonero-Martínez, A.; Cano, D.; García-Bocanegra, I. 2016. Spatial-temporal Trends and Factors Associated with the Bluetongue Virus Seropositivity in Large Game Hunting Areas from Southern Spain. Transbound Emerg Dis. 63(5), pp. 339-346.
- Publication in scientific journal. Dziegiel, B.; Adaszek, L.; Carbonero-Martínez, A.; Lyp, P.; Winiarczyk, M.; Debiak, P.; Winiarczyk, S. 2016. Detection of canine vector-borne diseases in eastern Poland by ELISA and PCR. Parasitol Res. 115(3), pp. 1039-1044.
- Publication in scientific journal. Carbonero-Martínez, A.; Guzman-Ordoñez, L.T.; Montaña, K.; Torralbo-Montoro, A.; Arenas-Montes, A.J.; Saa, L.R. 2015. Coxiella burnetii seroprevalence and associated risk factors in dairy and mixed cattle farms from Ecuador. Prev Vet Med. 118(4), pp. 427-435.
- Publication in scientific journal. Carbonero-Martínez, A. 2015. Response to the Letter to the Editor by Prof. Viroj Wiwanitkit. Prev Vet Med. 119, pp. 91-92.
- Publication in scientific journal. Torralbo-Montoro, A.; Borge-Rodríguez, C.; García-Bocanegra, I.; Méric, G.; Perea-Remujo, J.A.; Carbonero-Martínez, A. 2015. Higher resistance of Campylobacter coli compared to Campylobacter jejuni at chicken slaughterhouse. Comp Immunol Microbiol Infect Dis. 39, pp. 47-52.

## C.2. Research projects and grants

AGL2013-49159-C2-2-R. Epidemiology of bovine tuberculosis in domestic animals in Spain: Involvement of domestic and wild reservoirs and evaluation of control measures. Ministry of Economy and Competitiveness. Duration: 2014-2017. Funding: 96,800 €.

FAU2008-00019-C03-02. Epidemiology, control and entomological aspects of Bluetongue (BT) in wild ruminants in Spain. INIA, Ministry of Economy and Competitiveness. Duration: 2008-2011. Funding: 41,758.8 €.

AGR-132. Ovine Catarrhal Fever (Bluetongue): study of immune response and persistent infection. Ministry of Innovation, Science and Business of the Andalusian Government. Duration: 2006-2009. Funding: 129,000 €.

AGL2003-08848. Molecular epidemiological characterization of strains of *Streptococcus suis* isolated in pigs in Spain. Ministry of Science and Technology. Duration: 2004-2006. Funding: 46,000 €.

AGL2004-01899. Epidemiological bases for the rational control of myxomatosis and RHD in populations of wild rabbits in Southern Spain. Study of predictive models for health improvement and conservation. Ministry of Science and Technology. Duration: 2005-2007. Funding: 42,550 €.

### C.3. Contracts

12020049. Diagnosis of infectious diseases of importance in animal health and public health. Duration: 2020-2023. Funding: 30.250 €.

12020091. Obtaining milk immune to BCoV. COVAP. Duration: 2020-2020. Funding: 2.643,85 €.

12020086. Service for the analysis of diseases of the Epidemiological Surveillance of Wild Fauna of Andalusia program and scientific-technical service for the study of their health status (NET275495).

Environment and Water Agency (AMAA). Andalusian Government. Duration: 2020-2023. Funding: 165.915,20 €.

22018001 CONV 621/17. Health and welfare management program at the Animal Control Center of Córdoba. Córdoba City Hall. Duration: 2018-2021. Funding: 214,299.79 €.

12018158. Design, implementation and evaluation of health programs to mitigate the risk of transmission of tuberculosis in extensive pigs. Solano Veterinary Company. Duration: 2018-2020. Funding: 36,807.99 €.

12018041. Service for the analysis of diseases of the Epidemiological Surveillance program for Wild Fauna of Andalusia and technical scientific service for the study of their sanitary status. Environment and Water Agency (AMAA). Andalusian Government. Duration: 2018-2019. Funding: 21,659 €.

12016106. Diagnosis of infectious and contagious diseases of importance in Animal Health and Public Health. Duration: 2016-2019. Funding: 24,200 €.

12015079. Epidemiological analysis of the Wildlife Epidemiological Surveillance program in Andalusia. Andalusian Government. Duration: 2014-2016. Funding: 10,793.20 €.

12013144. Testing of alternative products in the productive and sanitary improvement of layers. Capi Eggs Company. Duration: 2013-2015. Funding: 33,517 €.

12013145. Alternative products and new technologies for the differentiation and improvement of poultry products. Duration: 2013-2015. Funding: 49,111.78 €. Principal Investigator.

12012149. Evaluation of rabies vaccination in Andalusia. Andalusian Council of Official Veterinarian Colleges. Duration: 2012-2013. Funding: 13,248 €.

12010079. Technical scientific support for the study of diseases in hunting wildlife. Environmental management company of the Andalusian Government. Duration: 2010-2011. Funding: 20787,2 €.

12010005. Epidemiology of infections by *Campylobacter* spp. in broilers. UVESA Company. Duration: 2010-2012. Funding: 115,219.12 €. Principal Investigator.

12010033. Assessment of the duration of cellular and humoral immunity in vaccinated animals against caprine paratuberculosis. Cabraandalucia company. Duration: 2010. Funding: 36,981.85 €. Principal Investigator.