

ALEJANDRO CEBALLOS-MARQUEZ
MVZ, MSc, PhD

Investigador Senior (COLCIENCIAS Convocatoria No. 737 of 2015)

https://www.researchgate.net/profile/Alejandro_Ceballos-Marquez2

Universidad de Caldas
Facultad de Ciencias Agropecuarias
Calle 65 # 26 – 10
Manizales, Colombia

alejandro.ceballos@ucaldas.edu.co
P. +57 (6) 878-1500 - C. +57 (313) 797-3508
F. +57 (6) 878-1500 ext 15661

GENERAL

Lugar de nacimiento: Armenia, Colombia

Ciudadanía: Colombiano

EDUCACIÓN

2005 – 2011

Doctor of Philosophy, Epidemiología cuantitativa

Departamento de Salud Animal

Atlantic Veterinary College

University of Prince Edward Island, Charlottetown, Canada.

Tesis: Selenium in dairy cattle: Transfer to milk and udder health.
Project funded by Alltech Inc, USA and AVC-RF, Canada.

Supervisores: Dr Jeff Wichtel, BVSc, PhD, Dip. ACVT
Dr Herman W. Barkema, DVM, PhD

1994 – 1996

Master en Ciencias, Salud Animal

Instituto de Ciencias Clínicas Veterinarias

Universidad Austral de Chile, Valdivia, Chile.

Tesis: Actividad sanguínea de glutatión peroxidasa como indicador
del balance metabólico nutricional de selenio en hatos lecheros del
sur de Chile.
Proyecto FONDECYT-CHILE 195 – 1062.

Supervisor: Prof. Fernando G. Wittwer, DVM, MVSc

1985 – 1990

Médico Veterinario Zootecnista

Facultad de Medicina Veterinaria y Zootecnia
Universidad de Caldas, Manizales, Colombia.

Tesis: Evaluación del método de selección de los reemplazos y
fertilidad en vacas de lidia.

Supervisor: Dr. Gerardo Téllez L., MVZ

CURSOS DE POSTGRADO

2015	Introduction to time series regression. University of Prince Edward Island. Charlottetown, PEI, Canada.
2015	Introduction to survival analysis. University of Prince Edward Island. Charlottetown, PEI, Canada.
2014	Revisiones sistemáticas y meta-análisis Universidad de Caldas. Manizales, Colombia.
2012	Milk Quality. Cornell University (QMPS), Ithaca, NY, USA.
2011	Milk Quality. Cornell University (QMPS), Ithaca, NY, USA.
2010	Milk Quality. Cornell University (QMPS), Ithaca, NY, USA.
2008	Systematic reviews and meta-analysis. University of Prince Edward Island. Charlottetown, PEI, Canada.
2007	An introduction to Bayesian analysis and MCMC methods. University of Prince Edward Island. Charlottetown, PEI, Canada.
2007	An introduction to multilevel modeling. University of Prince Edward Island. Charlottetown, PEI, Canada.
2006	Introduction to survival analysis. University of Prince Edward Island. Charlottetown, PEI, Canada.
2003	Tools for infectious-disease end epidemiology. Institute of Preventive Veterinary Medicine. Universidad Austral de Chile, Valdivia, Chile.
1997	Aquaculture Fish Health Training Course.

Canadian Aquaculture Institute. Atlantic Veterinary College. University of Prince Edward Island, Charlottetown, Canada.

1992 VIIIth International Training Course on Animal Reproduction.
Japanese International Cooperation Agency-Universidad Austral de Chile.
Valdivia, Chile.

EXPERIENCIA PROFESIONAL

2016 – Presente	Decano de la Facultad de Ciencias Agropecuarias Universidad de Caldas, Manizales, Colombia.
1999 – Presente	Facultad de Ciencias Agropecuarias Universidad de Caldas, Manizales, Colombia. Profesor asociado
2014 – 2015	Universidad de Caldas Jefe de la Oficina de Investigaciones
2013 – 2016	University of Prince Edward Island, Atlantic Veterinary College Adjunct Professor (<i>ad honorem</i>).
2010 – Presente	University of Manitoba, Department of Animal Sciences Adjunct Professor (<i>ad honorem</i>).
2010 – 2011	Quality Milk Production Services Cornell University, Animal Health Diagnostic Services. Senior Extension Associate and General Manager of the Laboratory (Geneseo Western Laboratory).
2001 – 2002	Facultad de Ciencias Agrarias Universidad de Antioquia, Medellín, Colombia. Profesor invitado en nutrición de ganado lechero para cursos de postgrado.
1996 – 1999	Escuela de Medicina Veterinaria Universidad Católica de Temuco, Temuco, Chile.
1997 – 1997	Facultad de Ciencias Agrarias Universidad de La Frontera, Temuco, Chile. Profesor invitado en Zootecnia.
1993 – 1994	Práctica privada en Medicina Veterinaria y Zootecnia Armenia, Colombia.

1992 – 1993	Convenio Fondo DRI y Comité de Cafeteros del Quindío Armenia, Colombia. Coordinador general del convenio.
1990 – 1991	Convenio Fondo DRI y Comité de Cafeteros del Quindío Armenia, Colombia. Extensionista.

SUPERVISOR DE ESTUDIANTES DE POSTGRADO

2016 - Presente	Juan Felipe Velasco-Bolaños Doctor en Ciencias Agrarias (En curso) Universidad de Caldas, Manizales, Colombia.
2015 - Presente	Claudia Gisela Cobo-Ángel Doctor en Ciencias Agrarias (En curso) Universidad de Caldas, Manizales, Colombia.
2015 - Presente	Ana María Colonia Orozco Doctor en Ciencias Agrarias (En curso) Universidad de Caldas, Manizales, Colombia.
2013 - 2016	Paulo César Duque-Madrid Doctor en Ciencias Agrarias Universidad de Caldas, Manizales, Colombia.
2011 - 2015	Néstor Alonso Villa-Arcila Doctor en Ciencias Agrarias Universidad de Caldas, Manizales, Colombia. Ketosis, mastitis and reproductive performance in Holstein and Normande Cows.
2014 - Presente	Ana Sofía Jaramillo Jaramillo Máster en Ciencias Veterinarias (En curso) Universidad de Caldas, Manizales, Colombia.
2014 - Presente	Laura María Lasso Rojas Máster en Ciencias Veterinarias (En curso) Universidad de Caldas, Manizales, Colombia.
2014 - Presente	Aura María Valencia Mejía Máster en Sistemas de Producción Agropecuaria (En curso) Universidad de Caldas, Manizales, Colombia.
2014 - 2016	Juan Felipe Velasco Bolaños

Máster en Ciencias Veterinarias (En curso)
Universidad de Caldas, Manizales, Colombia.

2013 - 2015

Lina María González Gordon

MSc en Epidemiología

Universidad Nacional de Colombia - Sede Bogotá, Bogotá DC,
Colombia.

CONSULTORÍAS

2012 – Presente

MSD Animal Health Global

Sanidad de la ubre.

2005 – Presente

Los Ranchos SA

Cartago, Colombia.

Nutrición de ganado lechero.

2002 – Presente

PROAGRO Ltd.

Manizales, Caldas.

Nutrición mineral en ganado lechero.

2012 – 2015

ELANCO - Elly Lilly

Bioestadística y diseño de experimentos.

2005 – 2013

BAYER Health Care - Colombia

Suplementación mineral para ganado lechero.

2002 – 2003

Alimento Energético – Proteico SA

Cartago, Valle.

Desarrollo de suplementos para ganado lechero.

PROFESOR VISITANTE

2015

Instituto of Microbiología

Universidad Austral de Chile, Valdivia, Chile.

2002

Facultad de Ciencias Agrarias

Universidad de Cuenca, Cuenca, Ecuador.

2001

Facultad de Ciencias Veterinarias

Universidad Austral de Chile, Valdivia, Chile.

PREMIOS Y MERITOS ACADÉMICOS

- 2009** **Natural Sciences and Engineering Research Council of Canada (NSERC)**
Residual Fund Conference Travel Award.
- 2007** Alltech's prize to the Latin American investigation.
- 2007** **SOCIEDAD CHILENA DE PRODUCCIÓN ANIMAL**
Mejor trabajo en la sección: Nutrición y Alimentación.
- 2007** **Dr. Ray Long Award**
Fifteenth Annual Graduate Studies & Research Days. Atlantic Veterinary College, Charlottetown, PE, Canada.
- 2007** Silver Prize to the presentation in the section of Animal Health Research. Graduate Studies & Research, Atlantic Veterinary College, Charlottetown, PE, Canada.
- 2002** **Prize Professor Heiner Sommer**
Best work of investigation presented at the Xth Congress of the International Society of Animal Clinical Biochemistry. Gainesville, FL, USA.
- 1997** **SOCIEDAD CHILENA DE PRODUCCIÓN ANIMAL**
Mejor trabajo en la sección: Genética, Reproducción Animal y Salud Animal.
- 1996** **The International Society of Animal Clinical Biochemistry**
Best Poster Presentation.
Glasgow, Scotland.

PUBLICACIONES

ESTADÍSTICAS EN RESEARCH GATE (al día 13 de marzo de 2018)

Puntaje RG:	21.99
Publicaciones:	96
Impacto de las citaciones (Índice H):	12
Lecturas:	5155
Citaciones:	445

Capítulos de libro

GUTIERREZ-SOLANO, C., **A. CEBALLOS-MARQUEZ**, Y. H. SCHUKKEN. 2011. Bilingual trainings for milkers in New York State: A success for quality milk. *In*: HOGVEEN, H. and LAM,

T.J.G.M. (ed). 2011. Udder Health and Communication. Wageningen Academic Publishers. Wageningen, The Netherlands. ISBN: 978-90-8686-185-9.

CEBALLOS-MARQUEZ, A., M. LOPEZ-BENAVIDES, M., B. J. RAUCH, H. SCHUKKEN. 2011. Efficacy of teat dips based on naturally occurring new intramammary infections and somatic cell count. *In:* HOGEVEEN, H. and LAM, T.J.G.M. (ed). 2011. Udder Health and Communication. Wageningen Academic Publishers. Wageningen, The Netherlands. ISBN: 978-90-8686-185-9.

CEBALLOS, A., J. SANCHEZ, J. MONTGOMERY, H. W. BARKEMA, H. STRYHN, J. WICHTEL. 2008. Meta-analysis on the effect of oral selenium supplementation in cattle on milk selenium concentration. *In:* LAM, T.J.G.M. (ed). 2008. Mastitis control: From science to practice. Wageningen Academic Publishers. Wageningen, The Netherlands. ISBN: 90-8686-085-0.

CEBALLOS, A., V. RUBIO, J. ESTRADA. 2008. Mineral imbalances in cattle under agroforestry systems [Spanish]. *In:* MURGUEITIO, E., C. CUARTAS, J. NARANJO (ed). 2008. Ganadería del futuro: Investigación para el desarrollo. Fundación CIPAV. Cali, Colombia.

GALLO, J., **A. CEBALLOS.** 2005. Manipulation of ruminal fermentation and its implications on the nutritional status of ruminants [Spanish]. *In:* PABON, M., J. OSSA (ed). 2005. Bioquímica, nutrición y alimentación de la vaca. Fondo editorial Biogénesis. Medellín, Colombia. ISBN: 958-337277-3.

POSADA, S., G. MONTOYA, **A. CEBALLOS.** 2005. Effects of tannins on digestion, metabolism, and production in ruminants [Spanish]. *In:* PABON, M., J. OSSA (ed). 2005. Bioquímica, nutrición y alimentación de la vaca. Fondo editorial Biogénesis. Medellín, Colombia. ISBN: 958-337277-3.

Artículos publicados en revistas con comité editorial y revisión por pares

CEBALLOS, A. 1991. Description of one case of an inactive verminous arteritis in a horse [Spanish]. *Revista Veterinaria y Zootecnia de Caldas* 5: 11 - 14.

CEBALLOS, A., O. ARAYA, E. PAREDES. 1996. Clinical and pathological aspects of steatosis in equine: description of one case [Spanish]. *Archivos de Medicina Veterinaria* 28: 125 - 130.

CEBALLOS, A., F. WITTWER. 1996. Selenium metabolism in ruminants [Spanish]. *Archivos de Medicina Veterinaria* 28: 5-18.

CEBALLOS, A. 1996. Overconditioning near to calving in dairy cows and its effect on animal health [Spanish]. *Revista Veterinaria y Zootecnia de Caldas* 9: 6-13.

WITTWER, F., O. ARAYA, **A. CEBALLOS**, H. BÖHMWALD. 1997. Mineral concentrations in forage and animals exposed to the eruption of Lonquimay volcano [Spanish]. *Pesquisa Agropecuaria Brasileira* 32: 655-661.

CEBALLOS, A., F. WITTWER, P. A. CONTRERAS, H. BÖHMWALD. 1998. Blood activity of glutathione peroxidase in dairy herds from the south of Chile: Age and seasonal variations [Spanish]. *Archivos de Medicina Veterinaria* 30: 13-22.

ENRIQUEZ, R., M. MONRAS, **A. CEBALLOS**, C. IGOR. 1998. First isolation of a rickettsial-like organism from *Galaxias maculatus* (Puye) in Chile [Spanish]. *Archivos de Medicina Veterinaria* 30 (Supplement): 233-234.

CEBALLOS, A., R. VEGA, M. ACEVEDO, R. ENRIQUEZ, A. BADILLA, C. IGOR, A. MENDOZA. 1998. Identification of more common diseases in *Galaxias maculatus* Jenyns, 1842 (Puye) captured in lakes from IX and X Regions (Chile) and maintained under conditions of captivity [Spanish]. *Archivos de Medicina Veterinaria* 30 (Supplement): 249-250.

CEBALLOS, A., F. G. WITTWER, M. ANDAUR, H. BÖHMWALD. 1998. Blood activity of glutathione peroxidase and superoxide dismutase in grazing horses from the south of Chile [Spanish]. *Archivos de Medicina Veterinaria* 30 (Supplement): 339-340.

CEBALLOS, A., F.G. WITTWER, M. ANDAUR, H. BÖHMWALD. 1998. Glutathione peroxidase y superoxide dismutase in grazing horses and their relationship to the blood activity of aspartate amino transferase and creatinkinase [Spanish]. *Archivos de Medicina Veterinaria* 30 (Supplement): 341-342.

CEBALLOS, A., F.G. WITTWER, P. A. CONTRERAS, A. QUIROZ, H. BÖHMWALD. 1999. Blood activity of glutathione peroxidase in dairy herds correlated with blood and plasma concentration of selenium [Spanish]. *Pesquisa Agropecuaria Brasileira* 34 (12): 2331-2338.

VILLA, N. A., **A. CEBALLOS**, D. CERON, C. A. SERNA. 1999. Clinical biochemistry values in serum from grazing Brahman cows [Spanish]. *Pesquisa Agropecuaria Brasileira* 34 (12): 2339-2343.

CEBALLOS, A., M. ANDAUR. 1999. Determination of energy balance in dairy cows from the south of Chile [Spanish]. *Revista Colombiana de Ciencias Pecuarias* 12 (Supplement): 42.

VILLA, N., **A. CEBALLOS**, G. GARCIA, F. FRANCO. 1999. Blood activity of glutathione peroxidase and superoxide dismutase and its relationship to the activity in seminal plasma from grazing Brahman (*Bos indicus*) bulls [Spanish]. *Revista Colombiana de Ciencias Pecuarias* 12 (Supplement): 185.

VILLA, N., **A. CEBALLOS**, S. CORREA, E. LOPEZ, J. I. SALAZAR. 1999. Evaluation of the antioxidant status in seminal plasma in grazing and confined Brahman (*Bos indicus*) bulls [Spanish]. *Revista Colombiana de Ciencias Pecuarias* 12 (Supplement): 187.

SALAZAR, J. I., N. A. VILLA, F. GARCIA, C. LAY, G. HUCHIMA, **A. CEBALLOS**. 1999. Hyposmotic test in order to evaluate three diluents for managing semen of boars [Spanish]. *Revista Colombiana de Ciencias Pecuarias* 12 (Supplement): 199.

CEBALLOS, A., P. M. GÓMEZ, M. L. VÉLEZ, N. A. VILLA, L. F. LÓPEZ. 2002. Variation of energy balance indicators according to physiological status in dairy cows from Manizales, Colombia [Spanish]. *Revista Colombiana de Ciencias Pecuarias* 15 (1): 13-25.

CEBALLOS, A., N. A. VILLA, A. BOHÓRQUEZ, J. QUICENO, M. JARAMILLO, G. GIRALDO. 2002. Appraisal of metabolic profile test in dairy herds from upper coffee lands in Colombia [Spanish]. *Revista Colombiana de Ciencias Pecuarias* 15 (1): 26-35.

WITTWER, F., P. ARANEDA, **A. CEBALLOS**, P. A. CONTRERAS, M. ANDAUR, H. BÖHMWALD. 2002. Glutathione peroxidase (GSH-Px) activity in grazing dairy cattle in the south of Chile (IX Region) and its relation with selenium content in the forage [Spanish]. *Archivos de Medicina Veterinaria* 34: 49-57.

CONTRERAS, P. A., **A. CEBALLOS**, R. MATAMOROS, F. WITTWER. 2003. Iodine concentration in forages from dairy farms in the IXth and Xth Regions of Chile [Spanish]. *Archivos de Medicina Veterinaria* 35: 75-79.

VILLA, N. A., A. BOHÓRQUEZ, **A. CEBALLOS**, C. ROCHA. 2003. Evaluation of the serving capacity in Normande bulls in tropical regions from Caldas and Quindio [Spanish]. *Revista Veterinaria y Zootecnia de Caldas* 12: 19-27.

RATTO, M., **A. CEBALLOS**, R. MATAMOROS, F. WITTWER, H. BÖHMWALD, M. WOLTER. 2003. Effect of selenium supplementation on superovulation and embryo recovery in dairy cows treated with eCG [Spanish]. *Revista Veterinaria y Zootecnia de Caldas* 12 (2): 2-6.

CEBALLOS, A., F. WITTWER, M. ANDAUR, H. BÖHMWALD. 2003. Metabolic balance of selenium in grazing sheep from IXth Region, Chile [Spanish]. *Revista Veterinaria y Zootecnia de Caldas* 12: 7-12.

CEBALLOS, A., H. CORREA, J. LOAIZA, N. A. VILLA. 2003. Evaluation of the nutritional metabolic balance of selenium, copper and zinc of dairy herds in Manizales, Colombia [Spanish]. [*Revista Colombiana de Ciencias Pecuarias*](#) 16 (1): 19-25.

CEBALLOS, A., N. A. VILLA, D. A. SILVA, J. A. VELASQUEZ, M. GUTIERREZ. 2004. Serum concentration of calcium, phosphorus, and magnesium in bullfighting cattle under grazing systems from Colombian Andes Mountains [Spanish]. *Revista Veterinaria y Zootecnia de Caldas* 13: 18-26.

CEBALLOS, A., N. A. VILLA, T. E. BETANCOURTH, D. V. RONCANCIO. 2004. Calcium, phosphorus and magnesium levels before and after calving in dairy cows from Manizales, Colombia [Spanish]. [*Revista Colombiana de Ciencias Pecuarias*](#) 17 (2): 125-133.

- ARIAS, L. F., N. MEJIA, C. SANCHEZ, C. PELAEZ, **A. CEBALLOS**. 2004. Aspartate aminotransferase and creatinase activity and their relationship with glutathione peroxidase blood activity in Thoroughbred racehorses before and after a race of 1100 meters [Spanish]. [*Revista Colombiana de Ciencias Pecuarias*](#) 17 (2): 133-140.
- ARICAPA, H. J., R. BEDOYA, A. P. GARCIA, C. HEREDIA, A. MALDONADO, C. PELAEZ, **A. CEBALLOS**. 2004. Immunological status during the first week of calves maintained under two different production systems [Spanish]. [*Revista Colombiana de Ciencias Pecuarias*](#) 17 (2): 167-174.
- JARAMILLO, S., N. A. VILLA, A. F. PINEDA, A. B. GALLEGU, P. TABARES, **A. CEBALLOS**. 2005. Blood activity of superoxide dismutase and glutathione peroxidase in grazing dairy heifers [Spanish]. [*Pesquisa Agropecuaria Brasileira*](#) 40 (11): 1115-1121.
- JORDAN, D., N. A. VILLA, M. GUTIERREZ, A. B. GALLEGU, G. OCHOA, **A. CEBALLOS**. 2006. Blood chemistry in bullfighting cattle maintained under grazing conditions in Andes Mountains from Colombia [Spanish]. [*Revista Colombiana de Ciencias Pecuarias*](#) 19 (1): 18-26.
- VARGAS, A., C. A. OSORIO, J. LOAIZA, N. A. VILLA, **A. CEBALLOS**. 2006. Effect of the use of a recombinant bovine somatotropin (rbST) in dairy grazing cows in a tropical environment [Spanish]. [*Archivos de Medicina Veterinaria*](#) 38(1): 33-38.
- VILLA-ARCILA, N.A., **CEBALLOS-MARQUEZ, A.** 2007. Free radicals and infertility in the male. *Veterinaria y Zootecnia* 1(2): 87-97.
- KRUZE, J., **A. CEBALLOS**, H. STRYHN, A. MELLA, R. MATAMOROS, P. A. CONTRERAS, V. LEYAN, F. WITTEW. 2007. Somatic cell count in milk of selenium-supplemented dairy cows after an intramammary challenge with *Staphylococcus aureus*. [*Journal of Veterinary Medicine series A*](#) 54: 478-483.
- MATAMOROS, R., **A. CEBALLOS**, P. A. CONTRERAS, C. QUIROGA, M. ANDAUR, F. WITTEW. 2008. Serum concentrations of triiodothyronine, thyroxine, and lipid profile in dairy cows fed with a low selenium diet [Spanish]. [*Archivos de Medicina Veterinaria*](#) 40(1): 23-29.
- VILLA, N. A., W. MORENO, **A. CEBALLOS**. 2008. Activity of glutathione peroxidase and superoxide dismutase in whole blood, blood plasma, and seminal plasma in Normande bulls [Spanish]. [*Revista Colombiana de Ciencias Pecuarias*](#) 21: 537-545.
- CEBALLOS, A.**, J. SÁNCHEZ, H. STRYHN, J. B. MONTGOMERY, H. W. BARKEMA, J. J. WICHEL. 2009. Meta-analysis of the effect of oral selenium supplementation on milk selenium concentration in cattle. [*Journal of Dairy Science*](#) 92: 324-342.
- VILLA, N. A., E. F. PULGARIN, P. A. TABARES, E. ANGARITA, **A. CEBALLOS**. 2009. Body size and serum and follicular concentration of lipids and glucose in fertile and infertile Brahman cows [Spanish]. [*Pesquisa Agropecuaria Brasileira*](#) 44: 1198-1204.

VILLA, N. A., L. E. SÁNCHEZ, A. CEBALLOS. 2009. Activity of glutathione peroxidase and superoxide dismutase of seminal plasma and blood of boars [Spanish]. *Revista Veterinaria y Zootecnia de Caldas* 18: 9-14.

VILLA-ARCILA, N. A., A. CEBALLOS-MARQUEZ, P. C. DUQUE-MADRID, L. G. RESTREPO-RESTREPO. 2010. Determination of the antioxidant status in blood, serum and seminal plasma in dogs [Spanish]. *Veterinaria y Zootecnia* 4: 30-36.

CEBALLOS, A., J. KRUIZE, H. W. BARKEMA, I. R. DOHOO, J. SÁNCHEZ, D. URIBE, J. J. WICHTEL, F. WITTEWER. 2010. Barium selenate supplementation and its effect on intramammary infection in pasture-based dairy cows. *Journal of Dairy Science* 93:1468-1477.

CEBALLOS-MARQUEZ, A., H. W. BARKEMA, H. STRYHN, J. J. WICHTEL, J. NEUMANN, A. MELLA, J. KRUIZE, M. S. ESPINDOLA, F. WITTEWER. 2010. The effect of selenium supplementation before calving on early-lactation udder health in pastured dairy heifers. *Journal of Dairy Science* 93: 4602-4612.

CEBALLOS-MARQUEZ, A., H. W. BARKEMA, H. STRYHN, I. R. DOHOO, G. P. KEEFE, J. J. WICHTEL. 2010. Milk selenium concentration and its association with udder health in Atlantic Canadian dairy herds. *Journal of Dairy Science* 93: 4700-4709.

CEDEÑO-QUEVEDO, D., A. CEBALLOS-MARQUEZ, C. GARZON, DAZA-BOLAÑOS, C. A. 2011. A comparative study of metabolic profiles and mineral balance on dairy farms from two áreas in Nariño [Spanish]. *Orinoquía* 15: 160-168.

VILLA, N. A., J. M. OSORIO, D. M. ESCOBAR, A. CEBALLOS. 2011. Biochemical indicators of energy balance around calving in pasture-based Brahman cows in a Colombian tropic region [Spanish]. *Revista Científica Universidad del Zulia* 21: 353-359.

CEBALLOS-MARQUEZ, A., H. W. BARKEMA, H. STRYHN, I. R. DOHOO, G. P. KEEFE, J. J. WICHTEL. 2012. Bulk tank milk selenium and its association with milk production parameters in Canadian dairy herds. *Canadian Veterinary Journal* 53: 51-56.

VILLA, N. A., D. CASTAÑO, P. C. DUQUE, A. CEBALLOS. 2012. Glutathione peroxidase and superoxide dismutase activities in blood and seminal plasma in Colombian stallions [Spanish]. *Revista Colombiana de Ciencias Pecuarias* 25: 64-70.

CEBALLOS-MARQUEZ, A., M. LOPEZ-BENAVIDES, B. J. RAUCH, T. HEMLING, Y. H. SCHUKKEN. 2013. The efficacy of two teat disinfectants based on naturally occurring new intramammary infections and somatic cell count. *Journal of Dairy Science* 96: 8081-8092.

CEBALLOS, A., N. A. VILLA. 2014. Urea concentration in bulk tank milk from dairy herds of Colombian Coffee Triangle [Spanish]. *Revista Científica Universidad del Zulia* 21: 353-359.

COBO-ANGEL, C., **A. CEBALLOS-MARQUEZ**, J. J. WICHTEL. 2014. Selenium in milk and human health. *Animal Frontiers* 4: 38-43.

RODRIGUEZ-LECOMPTE, J. C., A. D. KROEKER, S. LI, **A. CEBALLOS-MARQUEZ**, J. C. PLAIZIER. 2014. Systemic immune and metabolic responses during subacute ruminal acidosis in non-lactating cows. *Journal of Dairy Science* 97: 7777-7787.

GÓMEZ, G., C. VÉLEZ, **A. CEBALLOS**, F. J. HENAO. 2014. Systematic review of factors associated with the presence of cytoplasmic droplets in boars [Spanish]. *Revista Salud Pública* 16: 779-788.

REYES, J. M. CHAFFER, J. SANCHEZ, G. TORRES, D. MACIAS, M. JARAMILLO, P. C. DUQUE, **A. CEBALLOS**, G. P. KEEFE. 2015. Evaluation of the efficacy of intramuscular versus intramammary treatment of subclinical *Streptococcus agalactiae* mastitis in dairy cows in Colombia. *Journal of Dairy Science* 98: 5294-5303 (<http://dx.doi.org/10.3168/jds.2014-9199>).

NEUMANN, J., **A. CEBALLOS**, E. QUIROZ, R. CHIHUAILAF, H. BÖHMWALD, F. WITTEW, M. SEPULVEDA. 2016. Effect of prepartum supplementation with selenium yeast or barium selenate on the blood selenium concentrations in dairy cows and their calves [Spanish]. *Archivos de Medicina Veterinaria* 48(1): 37-42.

VILLA-ARCILA, N. A., P. C. DUQUE-MADRID, S. SÁNCHEZ-ARIAS, J. C. RODRIGUEZ-LECOMPTE, M. RATO, J. SANCHEZ, **A. CEBALLOS-MARQUEZ**. 2017. Butyrate concentration before and after calving is not associated with the odds of subclinical mastitis in grazing dairy cows. *Livestock Science* 198: 195-200 (<https://doi.org/10.1016/j.livsci.2017.02.029>).

VILLA-ARCILA, N. A., P. C. DUQUE, L. LASSO, S. SÁNCHEZ, **A. CEBALLOS**. 2017. Etiology of subclinical intramammary infections at drying-off and around calving in dairy cows in Caldas, Colombia [Spanish]. *Revista Científica Universidad del Zulia* (Accepted).

VILLA-ARCILA, N. A., J. SÁNCHEZ, M. H. RATO, J. C. RODRIGUEZ-LECOMPTE, P. C. DUQUE-MADRID, S. SÁNCHEZ-ARIAS, **A. CEBALLOS-MARQUEZ**. 2017. The association between subclinical mastitis and reproductive performance in dairy cows in Colombia. *Animal Reproduction Science* (Aceptado).

VILLA-ARCILA, N. A., **A. CEBALLOS**. 2017. Testosterone concentration induced with GnRH in Brahman bulls and its relationship to testicular circumference, reaction time and number of services [Spanish]. *Revista de Investigaciones Veterinarias del Perú* (Con el Editor).

DUQUE-MADRID, P. C., M. LOPEZ-BENAVIDES, M. A. MUNOZ, J. F. VELASCO-BOLAÑOS, **A. CEBALLOS-MARQUEZ**. 2017. Sensitivity and specificity of somatic cell count in quarter milk samples to decide further microbiological culture of milk samples. *Preventive Veterinary Medicine* (Submitted on July 10th of 2017).

Publicaciones en revistas que no tienen comité editor

CEBALLOS, A. 1992. Considerations about the fertility of Zebu cows according to the season of the year [Spanish]. *El Cebú* 268 (October – November): 62 - 68.

CEBALLOS, A. 1996. Metabolic profile test for the diagnosis of nutrition-reproduction interactions in dairy cows [Spanish]. *Despertar Lechero* N° 13: 7-23.

CEBALLOS, A. 1997. Treatment and prevention of Milk Fever in dairy cows [Spanish]. *Despertar Lechero* N° 14: 7-22.

CEBALLOS, A. 1999. Fetal membrane retention related to selenium deficiency in dairy cows [Spanish]. *Despertar Lechero* N° 16.

CEBALLOS-MARQUEZ, A., Y. H. SCHUKKEN. 2011. Nutrition in dairy cows: Is there any association with high somatic cell count in the fresh cow? *Eastern Dairybusiness* 3: 38-39.

CEBALLOS-MARQUEZ, A. 2011. Nutrition and mastitis [Spanish]. *COLANTA Pecuaria*.

CEBALLOS-MARQUEZ, A. 2011. Somatic cell count: What is its meaning and what does information give us? [Spanish]. *COLANTA Pecuaria*.

CEBALLOS-MARQUEZ, A. 2011. Somatic cell count: Key information to obtain high quality milk [Spanish]. *Revista Holstein-Colombia*.

CEBALLOS-MARQUEZ, A. 2013. Monitoring the somatic cell count: Taking udder health programs a step forward [Spanish]. *Referencias para Consultorio MV*.

CEBALLOS-MARQUEZ, A. 2015. Prevention and control of bovine mastitis: The praxis with scientific basis [Spanish]. *COLANTA Pecuaria*.

CEBALLOS-MARQUEZ, A., C. G. COBO-ANGEL. 2015. Infections by *Streptococcus agalactiae*: ¿Only one infection? [Spanish]. *Investigación en Mastitis y Salud Mamaria* (Published by RELIM).

Resúmenes y presentaciones a congresos nacionales e internacionales

CEBALLOS, A. 1991. Evaluation of the fertility of bullfighting cows [Spanish]. *In:* XVII National Congress of Veterinary Medicine and Animal Science. Popayán, Colombia.

CEBALLOS, A. 1992. Considerations about the fertility of Zebu cows according to the season of the year [Spanish]. *In:* XVIII National Congress of Veterinary Medicine and Animal Science. Ibagué, Colombia.

CEBALLOS, A. 1993. Metabolic disorders and infertility in dairy cows related to the consume of Passion fruit (*Passiflora edulis*) peels [Spanish]. *In:* VIII International Course on Animal Reproduction. Valdivia, Chile.

CEBALLOS, A., F. WITTEWER, P. A. CONTRERAS, H. BÖHMWALD. 1995. Selenium: blood activity of glutathione peroxidase in dairy herds from Valdivia, Chile [Spanish]. *In:* XX Annual Meeting of Chilean Society of Animal Science. Coquimbo, Chile.

CEBALLOS, A., F. WITTEWER, P. CONTRERAS, H. BÖHMWALD. 1995. Blood activity of glutathione peroxidase in dairy herds from Valdivia, Chile in order to evaluate the metabolic nutritional status of selenium [Spanish]. *In:* VIII Panamerican Meeting of Buiatrics and II Chilean Meeting of Buiatrics. Osorno, Chile.

ARAYA, O., F. WITTEWER, **A. CEBALLOS.** 1995. Mineral concentration in forage and cattle serum after eruption of Lonquimay volcano [Spanish]. *In:* VIII Panamerican Meeting of Buiatrics and II Chilean Meeting of Buiatrics. Osorno, Chile.

CEBALLOS, A., F. WITTEWER, P. A. CONTRERAS, H. BÖHMWALD. 1996. Blood activity of glutathione peroxidase to evaluate the nutritional status of selenium in grazing dairy heifers (English). *In:* VII Congress of the International Society of Animal Clinical Biochemistry. University of Glasgow. Glasgow, Scotland.

CEBALLOS, A., F. WITTEWER, P. A. CONTRERAS, E. QUIROZ, H. BÖHMWALD. 1996. Correlation between blood activity of glutathione peroxidase in grazing dairy heifers and the concentration of selenium in forage [Spanish]. *In:* XXI Reunión Anual de la Sociedad Chilena de Producción Animal. Coyhaique, Chile.

RATTO, M., **A. CEBALLOS,** R. MATAMOROS, F. WITTEWER, M. WOLTER, H. BÖHMWALD. 1997. Effect of selenium supplementation on the superovulation with eCG and embryo recovery in dairy cows [Spanish]. *In:* III Chilean Meeting of Buiatrics. Osorno, Chile.

WITTEWER, F.G., **A. CEBALLOS,** P. A. CONTRERAS, H. BÖHMWALD. 1997. Blood activity of glutathione peroxidase in grazing cows and its relationship with the concentration of selenium in blood and plasma [Spanish]. *In:* XXII Annual Meeting of Chilean Society of Animal Science. Valdivia, Chile.

RATTO, M., E. ANGARITA, **A. CEBALLOS,** M. WOLTER, A. PATITUCCI. 1997. Effect of the treatment with eCG/GnRH or pFSH on the ovarian response and transferable embryos in dairy cows [Spanish]. *In:* XXII Annual Meeting of Chilean Society of Animal Science. Valdivia, Chile.

CEBALLOS, A. 1997. Evaluation of the antioxidant status [Spanish]. *In:* Seminar on Antioxidants in Nutrition and Animal Health. Universidad Austral de Chile. Valdivia, Chile.

CEBALLOS A. 1998. Free radicals, oxidative stress and evaluation of antioxidant status [Spanish]. *In*: Seminar on free radicals, mechanism of action and their effects on biology. Faculty of Medicine. Temuco, Chile.

CEBALLOS, A., F. WITTWER, M. ANDAUR, H. BÖHMWALD. 1998. Metabolic balance of selenium in grazing sheep from the IX Región, Chile [Spanish]. *In*: XXIII Annual Meeting of Chilean Society of Animal Science. Chillán, Chile.

CEBALLOS, A., A. PATITUCCI, O. ROMERO, M. ANDAUR, P. ASENJO. 1998. Nutritional miopathy in Cashmere goats produced by selenium deficiency [Spanish]. *In*: XXIII Annual Meeting of Chilean Society of Animal Science. Chillán, Chile.

CEBALLOS, A. 1998. The metabolic profile test and its use for diagnosing nutritional imbalances in dairy herds [Spanish]. *In*: I International Seminar on Reproduction and Metabolism in the Dairy Cow. Universidad de Caldas. Manizales, Colombia.

CEBALLOS, A. 1998. Antioxidants and Fertility [Spanish]. *In*: Chilean-Argentine Meeting of Andrology and Reproduction. Biotechnology Center of Reproduction, Faculty of Medicine. Universidad de La Frontera. Temuco, Chile.

CEBALLOS, A. 1999. Metabolic disorders in dairy cattle: Diagnosis, prevention and control [Spanish]. *In*: Course on Metabolic Disorders in Dairy Cattle. Faculty of Agricultural Sciences, Universidad de Caldas and CORPOICA Regional IX. Manizales, Colombia.

CEBALLOS, A. 1999. The use of fats as nutritional supplement for dairy cows [Spanish]. *In*: II International Seminar on Reproduction and Metabolism in the Dairy Cow. Universidad de Caldas. Manizales, Colombia.

CEBALLOS, A., M. ANDAUR. 1999. Biochemical indicators of energy imbalances in dairy cattle [Spanish]. *In*: II International Seminar on Reproduction and Metabolism in the Dairy Cow. Universidad de Caldas. Manizales, Colombia.

CEBALLOS, A., F. WITTWER, O. ROMERO, M. ANDAUR. 1999. Blood activity of glutathione peroxidase and weight gain in Cashmere goats supplemented with selenium [Spanish]. *In*: XXIV Annual Meeting of Chilean Society of Animal Science. Temuco, Chile.

CEBALLOS, A., R. MATAMOROS, F. WITTWER, O. ROMERO, M. ANDAUR. 1999. Effect of supplementation with selenium on thyroxine level and weight gain in Cashmere goats [Spanish]. *In*: XXIV Annual Meeting of Chilean Society of Animal Science. Temuco, Chile.

CONTRERAS, P.A., F. WITTWER, A. CEBALLOS, H. BÖHMWALD, F. RETAMAL. 1999. Effect of supplementation with selenium pellets on the fertility of grazing heifers [Spanish]. *In*: XXIV Annual Meeting of Chilean Society of Animal Science. Temuco, Chile.

WITTWER, F., P. A. CONTRERAS, A. CEBALLOS, H. BÖHMWALD, F. RETAMAL. 1999. Effect of supplementation with selenium pellets in grazing heifers on somatic cell counts at the

beginning of lactation [Spanish]. *In*: XXIV Annual Meeting of Chilean Society of Animal Science. Temuco, Chile.

VILLA, N.A., **A. CEBALLOS**, J.I. SALAZAR, S.T. CORREA, E. LOPEZ. 1999. Blood activity of glutathione peroxidase and superoxide dismutase in seminal plasma of Brahman (*Bos indicus*) bulls [Spanish]. *In*: XXIV Annual Meeting of Chilean Society of Animal Science. Temuco, Chile.

WITTEWER, F., P. A. CONTRERAS, **A. CEBALLOS**, H. BÖHMWALD, M. ANDAUR. 2000. Effect of selenium deficient hay on the diet and the use of single injection dose of a long acting selenium supplement on dairy cows (English). *In*: IX Congress of the International Society of Animal Clinical Biochemistry. Toulouse, Francia.

LEYAN, V., G. SCHURIG, F. WITTEWER, P. CONTRERAS, J. KRUIZE, **A. CEBALLOS**, R. MATAMOROS. 2000. Effect of nutritional selenium deficiency on the immune response against the RB51 vaccine [Spanish]. *In*: XI National Congress of Veterinary Medicine. Santiago de Chile, Chile.

STREET, E., F. WITTEWER, P. A. CONTRERAS, **A. CEBALLOS**, H. BÖHMWALD, M. ANDAUR, V. LEYAN, J. KRUIZE, R. MATAMOROS. 2000. Effect of a single dose of barium selenate during precalving on the lipoperoxidative process in dairy cows fed with selenium-deficient diet [Spanish]. *In*: XI National Congress of Veterinary Medicine. Santiago de Chile, Chile.

LEYAN, V., G. SCHURIG, F. WITTEWER, P. CONTRERAS, J. KRUIZE, **A. CEBALLOS**, R. MATAMOROS. 2000. Effect of selenium deficiency on immunocompetence in dairy cows [Spanish]. *In*: XXI World Buiatrics Congress. Punta del Este, Uruguay.

CEBALLOS, A. 2001. Principles of hematology [Spanish]. *In*: Course on Clinical Diagnosis in Dogs and Cats. Colombian Association of Veterinarians Specialized in Clinic and Surgery of Small Animals. Manizales, Colombia.

CEBALLOS, A. 2001. Principles of clinical chemistry in small animals [Spanish]. *In*: Course on Clinical Diagnosis in Dogs and Cats. Colombian Association of Veterinarians Specialized in Clinic and Surgery of Small Animals. Manizales, Colombia.

CEBALLOS, A. 2001. Analysis to determine the function of kidney and urine analysis [Spanish]. *In*: Course on Clinical Diagnosis in Dogs and Cats. Colombian Association of Veterinarians Specialized in Clinic and Surgery of Small Animals. Manizales, Colombia.

ARANEDA, P., F. WITTEWER, P. A. CONTRERAS, **A. CEBALLOS**, H. BÖHMWALD, M. ANDAUR, J. KRUIZE, V. LEYAN, R. MATAMOROS. 2001. Activity of blood glutathione peroxidase in dairy herds from IX Region, Chile and its relationship to selenium concentration in soil and forages [Spanish]. *In*: XXVI Annual Meeting of Chilean Society of Animal Science. Santiago de Chile, Chile.

VILLA, N.A., J.I. SALAZAR, **A. CEBALLOS**. 2002. Activity of glutathione peroxidase and superoxide dismutase in seminal plasma from different species of domestic males (English). *In*: X Congress of the International Society of Animal Clinical Biochemistry. Gainesville, Florida, USA.

CEBALLOS, A., N. A. VILLA, M. ANDAUR, P.M. GOMEZ, M.L. VELEZ, D.M. ESCOBAR, J.M. OSORIO, J. LOAIZA, F.G. WITTWER. 2002. Serum fructosamine concentration during the transitional period in Holstein and Brahman cows (English). *In*: X Congress of the International Society of Animal Clinical Biochemistry. Gainesville, Florida, USA.

CEBALLOS, A. 2002. Diagnostic approach to infertility related to nutritional imbalances [Spanish]. *In*: II Course on Bovine Reproduction. Study Group on Cattle Production and Health, Politécnico Colombiano Jaime Isaza Cadavid. Medellín, Colombia.

CEBALLOS, A. 2002. Effect of mineral imbalances on production and reproduction in grazing dairy cows [Spanish]. *In*: III International Course on Dairy and Beef Production. Cooperativa Lechera de Antioquia (COLANTA). Medellín, Colombia.

CEBALLOS, A. 2004. Mineral imbalances in cattle maintained under agroforestry systems [Spanish]. *In*: Seminar on Sustainable Cattle Production (ISBN: 958-9386-42-3). CIPAV Foundation. Armenia, Colombia.

CEBALLOS, A. 2004. Interpretation and use of feed analysis. *In*: Regional Seminar on Forages. CODEGAR. Pereira, Colombia.

CEBALLOS, A., J. KRUIZE, H. STRYHN, R. MATAMOROS, F. WITTWER, P. A. CONTRERAS. 2006. Glutathione peroxidase and somatic cell counts in dairy cows fed a selenium-low diet. *In*: XIV Graduate Students & Research Day. Atlantic Veterinary College, Charlottetown, PE, Canada.

CEBALLOS, A., I. DOHOO, J. WICHTEL, H. STRYHN, J. SANCHEZ, H. BARKEMA. 2006. Selenium and new intramammary infections in early lactation dairy heifers. *In*: XIV Graduate Students & Research Days. Atlantic Veterinary College, Charlottetown, PE, Canada.

CEBALLOS, A. 2006. Milk urea: use, interpretation and its relationship to milk protein [Spanish]. *In*: V Seminar on Milk and Beef competitiveness. Cooperativa Lechera de Antioquia (COLANTA), Medellín, Colombia.

CEBALLOS, A., H. BARKEMA, F. WITTWER, P. A. CONTRERAS, J. KRUIZE, J. C. RODRÍGUEZ-LECOMTE. 2006. Selenium supplementation in dairy cattle and udder immunity. *In*: 2006 Annual Scientific Meeting of the Canadian Bovine Mastitis Research Network. Mississauga, ON, Canada.

CEBALLOS, A., J. SANCHEZ, J. KRAUSE, J. J. WICHTEL. 2007. The effect of selenium supplementation on milk selenium concentration in cattle: A meta-analysis. *In*: XV Annual Graduate Students & Research Days. Atlantic Veterinary College, Charlottetown, PE, Canada.

CEBALLOS, A. 2007. Selenium supplementation in dairy cattle and immunity of the mammary gland [Spanish]. *In:* International Seminar on Dairy Cow Metabolism. BAYER Health Care, Bogotá DC and Medellín, Colombia.

CEBALLOS, A. 2007. Mineral balance in fresh cows [Spanish]. *In:* International Seminar on Dairy Cow Metabolism. BAYER Health Care. Bogotá DC and Medellín, Colombia.

CEBALLOS, A. 2007. Selenium supplementation in dairy cattle and udder immunity [Spanish]. *In:* VI International Seminar on Cattle Reproduction and Metabolism. Universidad de Caldas, Manizales, Colombia.

CEBALLOS, A. 2007. Modifying the composition of milk toward a healthy diet: Selenium as an example [Spanish]. *In:* VI International Seminar on Cattle Reproduction and Metabolism. Universidad de Caldas, Manizales, Colombia.

CEBALLOS, A. 2007. An introduction to systematic reviews and meta-analysis. Universidad Santo Tomas, Temuco, Chile.

CEBALLOS, A. 2007. Selenium as limiting factor of bovine mammary health. *In:* VIII Chilean Meeting of Buiatrics. Chilean Society of Buiatrics, Frutillar, Chile.

CEBALLOS, A., J. KRUIZE, D. URIBE, J. SANCHEZ, F. WITTEWER. 2007. Somatic cell count during a whole lactation period in selenium-supplemented cows. *In:* VIII Chilean Meeting of Buiatrics. Chilean Society of Buiatrics, Frutillar, Chile.

NEUMANN, J., R. CHIHUAILAF, **A. CEBALLOS**, H. BÖHMWALD, F. WITTEWER. 2007. Blood concentration of β -hydroxybutyrates and free fatty acids as indicators of the energy metabolism in dairy cattle [Spanish]. *In:* VIII Chilean Meeting of Buiatrics. Chilean Society of Buiatrics, Frutillar, Chile.

VILLA, N.A., **A. CEBALLOS**, H. MESA, E. ANGARITA, E. F. PULGARÍN, P. A. TABARES. 2007. Body measurements and their relationship to fertility in Brahman cows. *In:* VIII Chilean Meeting of Buiatrics. Chilean Society of Buiatrics, Frutillar, Chile.

CEBALLOS, A., J. SANCHEZ, J. B. KRAUSE, F. WITTEWER, H. W. BARKEMA, J. J. WICHTEL. 2007. Effect of oral selenium supplementation in cattle on milk selenium concentration: Meta-analysis. *In:* XXXII Annual meeting of the Chilean Society of Animal Production. Frutillar, Chile.

CEBALLOS, A., J. KRUIZE, D. URIBE, J. SANCHEZ, H. BARKEMA, J. WICHTEL, F. WITTEWER. 2008. Somatic cell count in selenium-supplemented lactating dairy cows. *In:* XVI Annual Graduate Students & Research Days. Atlantic Veterinary College, Charlottetown, PE, Canada.

CEBALLOS, A. 2008. Modifying the micromineral composition of the milk: Selenium as an example [Spanish]. *In:* X Pan-American Dairy Congress. San Jose, Costa Rica.

CEBALLOS, A., J. SANCHEZ, H. STRYHN, J. MONTGOMERY, H. W. BARKEMA, WICHTEL. A meta-analysis of the effect of oral selenium supplementation in cattle on milk selenium concentration. *In: [CAVEPM Meeting 2008](#)*. Charlottetown, PE, Canada.

CEBALLOS, A., J. NEUMANN, A. MELLA, J. KRUIZE, H. W. BARKEMA, J. WICHTEL, F. WITTEW. 2008. Effect of selenium supplementation on somatic cell count around calving and in lactating dairy cows. *In: [Mastitis control 2008](#)*. The Hague, The Netherlands.

CEBALLOS, A. 2008. Milk fever: Approach to prevention of an old problem [Spanish]. *In: IX Jornada Veterinaria - I Jornada Internacional de Medicina Veterinaria*. Universidad de Nariño. Pasto, Colombia.

CEBALLOS, A. 2008. Trace elements around calving: Selenium and the mammary gland in cattle [Spanish]. *In: IX Jornada Veterinaria - I Jornada Internacional de Medicina Veterinaria*. Universidad de Nariño. Pasto, Colombia.

CEBALLOS, A. 2008. Metabolic profiles in dairy herds from Nariño: Appraisal of the current situation [Spanish]. *In: IX Jornada Veterinaria - I Jornada Internacional de Medicina Veterinaria*. Universidad de Nariño. Pasto, Colombia.

CEBALLOS, A. 2008. Milk fever: Approach to prevention of an old problem [Spanish]. *In: IX Jornada Veterinaria - I Jornada Internacional de Medicina Veterinaria*. Universidad de Nariño. Pasto, Colombia.

CEBALLOS, A. 2008. Trace elements around calving: Selenium and the mammary gland in cattle [Spanish]. *In: IX Jornada Veterinaria - I Jornada Internacional de Medicina Veterinaria*. Universidad de Nariño. Pasto, Colombia.

CEBALLOS, A., J. KRUIZE, D. URIBE, J. SÁNCHEZ, H. W. BARKEMA, J. J. WICHTEL, J. NEUMANN, F. WITTEW. 2008. Effect of selenium supplementation on somatic cell counts in grazing dairy cattle. *In: Trace Elements in Man and Animals XIII Meeting*. Pucon, Chile.

NEUMANN, J., CEBALLOS, A., H. BOEHMWALD, F. WITTEW. 2008. Effect of selenium supplementation on milk yield in grazing dairy cows. *In: Trace Elements in Man and Animals XIII Meeting*. Pucon, Chile.

CEBALLOS, A., J. KRUIZE, I. R. DOHOO, J. SANCHEZ, H. W. BARKEMA, J. J. WICHTEL, F. WITTEW. 2009. Intramammary infections in pasture-based dairy cows supplemented with barium selenate before calving. *In: [Annual meeting of the American Dairy Science Association/American Society of Animal Science](#)*. Montreal, Canada.

CEBALLOS, A., J. SANCHEZ, I. DOHOO, H. W. BARKEMA, J. WICHTEL. 2009. Meta-analysis of longitudinal data: effect of oral selenium supplementation on milk selenium concentration in cattle. *In: XII Conference of the International Society for Veterinary Epidemiology and Economics*. University of Pretoria. Durban, South Africa.

CEBALLOS, A., H. STRYHN, H. BARKEMA, J. NEUMANN, A. MELLA, J. KRUIZE, J. WICHTEL, F. WITTWER. 2009. Selenium supplementation in pasture-based primiparous cows and its effect on somatic cell count around calving. *In: XII Conference of the International Society for Veterinary Epidemiology and Economics*. University of Pretoria. Durban, South Africa.

KROEKER, A. D., S. Li, S. SHEKHAR, **A. CEBALLOS**, D. O. KRAUSE, J. C. PLAIZIER, J. C. RODRIGUEZ-LECOMPTE. 2010. Characterization of immune and metabolic responses in the blood of dry cows induced with sub-acute ruminal acidosis (SARA). *In: [Annual meeting of the American Dairy Science Association/American Society of Animal Science](#)*. Denver, Colorado.

KEEFE, G. P., M. CHAFFER, **A. CEBALLOS**. 2011. Effects of *Streptococcus agalactiae* on the Columbian dairy industry. *In: [Joint Meeting of the American Association of Bovine Practitioners and National Mastitis Council](#)*. St. Louis, Missouri.

CEBALLOS-MARQUEZ, A., C. GUTIERREZ-SOLANO, Y. H. SCHUKKEN. 2011. Wearing gloves for milking in Western New York: to wear or not to wear? *In: [Udder Health and Communication](#)*. UGCN-University of Utrecht. Utrecht, The Netherlands.

GUTIERREZ-SOLANO, C., **A. CEBALLOS-MARQUEZ**, Y. H. SCHUKKEN. 2011. Bilingual trainings for milkers in New York State: A success for quality milk. *In: [Udder Health and Communication](#)*. UGCN-University of Utrecht. Utrecht, The Netherlands.

CEBALLOS-MARQUEZ, A., B. J. RAUCH, M. G. LOPEZ-BENAVIDES, T. HEMLING, Y. H. SCHUKKEN. 2011. Non-inferiority testing of iodine premilking teat disinfectants based on somatic cell count and naturally occurring new intramammary infections. *In: [Udder Health and Communication](#)*. UGCN-University of Utrecht. Utrecht, The Netherlands.

CEBALLOS-MARQUEZ, A., M. LOPEZ-BENAVIDES, B. J. RAUCH, T. HEMLING, Y. H. SCHUKKEN. 2012. Testing the Efficacy of Pre-milking Teat Dips Based on Non-inferiority and Naturally Occurring New Intramammary Infections. *In: [51st Annual Meeting of the National Mastitis Council](#)*. St. Pete Beach, FL, USA.

LOPEZ-BENAVIDES, M., **A. CEBALLOS-MARQUEZ**, B. J. RAUCH, T. HEMLING, Y. H. SCHUKKEN. 2012. Use of somatic cell count thresholds to decide microbiological culture of milk samples in field trials. *In: [51st Annual Meeting of the National Mastitis Council](#)*. St. Pete Beach, FL, USA.

CEBALLOS, A., M. LOPEZ, B. J. RAUCH, T. HEMLING, Y. H. SCHUKKEN. 2012. Non-inferiority clinical trials to evaluate the efficacy of teat disinfectants. *In: [XIII Conference of the International Society for Veterinary Epidemiology and Economics](#)*. Maastricht-Gent, The Netherlands-Belgium.

DUQUE-MADRID, P. C., N. A. VILLA-ARCILA, S. SÁNCHEZ-ARIAS, V. ZULUAGA, S. LONDOÑO, **A. CEBALLOS-MÁRQUEZ**. 2014. Evaluating the effectiveness of vaccination against

Staphylococcus aureus in crossbreed dairy cattle. **In:** [53rd Annual Meeting of the National Mastitis Council](#). Fort Worth, TX, USA.

COBO, C. G., N. A. VILLA, P. C. DUQUE, J. J. WICHTEL, J. SÁNCHEZ, **A. CEBALLOS**. 2014. Systematic review and meta-analysis of the effect of selenium supplementation on udder health in cattle. **In:** [National Mastitis Council Regional Meeting 2014](#). Ghent, Belgium.

VELASCO-BOLAÑOS, J., C. G. COBO, P. C. DUQUE, N. A. VILLA, L. M. LASSO, **A. CEBALLOS**. 2014. Prevalence and risk factors for *Streptococcus agalactiae* in bulk tank milk in the province of Caldas, Colombia [Spanish]. **In:** [II Meeting of the Latinamerican Network on Mastitis Research \(RELIM\)](#). San Carlos, Costa Rica.

KRUZE, J., A. MELLA, I. VALDÉS, F. ULLOA, N. OLIVARES, **A. CEBALLOS-MÁRQUEZ**. 2015. Evaluation of a new vaccine against mastitis in cows experimentally challenged with *Staphylococcus aureus*: Preliminary results [Spanish]. **In:** [XLIII Jornadas Uruguayas de Buiatría "Dr. Recaredo Ugarte"](#). Paysandú, Uruguay.

KRUZE, J., A. MELLA, I. VALDÉS, F. ULLOA, N. OLIVARES, **A. CEBALLOS-MÁRQUEZ**. 2015. Challenge trial to evaluate the efficacy of a new vaccine (Masti-Vac®) against *Staph. aureus* mastitis. **In:** [IDF World Dairy Summit](#). Vilnius, Lithuania.

VALENCIA, A. M., C. G. COBO, J. F. VELASCO, L. LASSO, P. C. DUQUE, N. A. VILLA, **A. CEBALLOS**. 2015. Frequency of *Staph. aureus* isolations in bulk tank milk from herds in Eje Cafetero [Spanish]. **In:** [XIII Encuentro Nacional y VI Internacional de los Investigadores de las Ciencias Pecuarias \(ENICIP\)](#). Medellín, Colombia.

COBO, C. G., A. M. VALENCIA, J. F. VELASCO, P. C. DUQUE, N. A. VILLA, L. M. LASSO, **A. CEBALLOS**. 2015. Prevalence and frequency of isolations of *Streptococcus agalactiae* in bulk tank milk from herds in Triangulo del Cafe [Spanish]. **In:** [XIII Encuentro Nacional y VI Internacional de los Investigadores de las Ciencias Pecuarias \(ENICIP\)](#). Medellín, Colombia.

VELASCO, J. F., A. M. VALENCIA, C. G. COBO, P. C. DUQUE, N. A. VILLA, L. M. LASSO, **A. CEBALLOS**. 2015. Prevalence of coagulase negative staphylococci in bulk tank milk from herds in Triangulo del Cafe [Spanish]. **In:** [XIII Encuentro Nacional y VI Internacional de los Investigadores de las Ciencias Pecuarias \(ENICIP\)](#). Medellín, Colombia.

GONZÁLEZ, L. M., H. GAITÁN, C. G. COBO, S. SÁNCHEZ, C. LÜDERS, **A. CEBALLOS**. 2016. Systematic review and meta-analysis of the effectiveness of cefquinome treatment protocols of clinical mastitis in dairy cows. **In:** [World Buiatric Congress](#). Dublin, Ireland, UK.

JARAMILLO-JARAMILLO, A. S., C. G. COBO-ANGEL, L. M. LASSO-ROJAS, S. B. AGUILAR-MARÍN, J. C. RODRIGUEZ-LECOMPTE, **A. CEBALLOS-MÁRQUEZ**. 2016. Comparative bacteriological and molecular detection of Group B *Streptococcus* from bulk tank milk samples. **In:** [World Buiatric Congress](#). Dublin, Ireland, UK.

VILLA, N. A., M. RATTO, J. C. RODRIGUEZ, J. SÁNCHEZ, P. DUQUE, S. SÁNCHEZ, **A. CEBALLOS**. 2016. Association between udder health and the calving-to-first service and calving-to-conception intervals in Holstein and Normande dairy cows. *In*: [World Buiatric Congress](#). Dublin, Ireland, UK.

DUQUE-MADRID, P. C., A. CEBALLOS-MARQUEZ, M. LOPEZ-BENAVIDES, M. MUÑOZ-DOMON. 2016. Sensitivity and specificity of SCC in quarter milk samples to diagnose intramammary infections. *In*: [World Buiatric Congress](#). Dublin, Ireland, UK.

Publicaciones como editor

GURJAR, A., SCHUKKEN, Y. H., P. MORONI, F. L. WELCOME, M. MUÑOZ, **A. CEBALLOS**. MUÑOZ. 2012. Klebsiella mastitis: “Killer bugs” in your herd. [51st Annual Meeting of the National Mastitis Council](#). St. Pete Beach, FL, USA.

SCHUKKEN, Y. H., P. MORONI, **A. CEBALLOS**, F. L. WELCOME, C. GUTIERREZ, B. J. RAUCH, 2011. 400,000K: Beat it!. 50th Annual Meeting of the National Mastitis Council. Arlington, VA, USA.

SCHUKKEN, Y., F. WELCOME, B. RAUCH, **A. CEBALLOS**, P. MORONI. 2010. 200,000 and beyond: What somatic cells really tell us. 49th Annual Meeting of the National Mastitis Council. Albuquerque, NM, USA.

CEBALLOS, A., N. A. VILLA, H. J. ARICAPA. 2004. Proceedings of the V International Seminar on Reproduction and Metabolism in Bovine (ISBN: 958-8231-27-2). Litografía Especial. Universidad de Caldas. Manizales, Colombia.

CEBALLOS, A., N. A. VILLA, H. J. ARICAPA. 2003. Proceedings of the IV International Seminar on Reproduction and Metabolism in Bovine. Artes Gráficas Tizán Ltda. Universidad de Caldas. Manizales, Colombia.

ESCOBAR, D. M., **A. CEBALLOS**, N. A. VILLA. 2002. Proceedings of the III International Seminar on Reproduction and Metabolism in Bovine (ISBN: 958-8041-6-6). Universidad de Caldas. Manizales, Colombia.

SALAZAR, J. I., N. A. VILLA, **A. CEBALLOS**. 1999. Proceedings of the II International Seminar on Reproduction and Metabolism in the Dairy Cow (ISBN: 958-8041-20-1). Universidad de Caldas. Manizales, Colombia.

CEBALLOS, A., F. G. WITTWER. 1997. Oxidative stress and antioxidants. Institute of Veterinary Clinical Sciences, Faculty of Veterinary Sciences. Universidad Austral de Chile. Valdivia, Chile.

CEBALLOS, A., P. ESCOBAR. 1997. Proceedings of Course on Feeding and Nutrition of Dairy Cows. Department of Veterinary Sciences. Universidad Católica de Temuco. Temuco, Chile.

PROYECTOS DE INVESTIGACION GANADOS

Año	Título	Fondo de financiación	Tipo de participación
2017- Presente	Genotypification of <i>Staphylococcus aureus</i> isolated of bovine milk and its relationship to severity of intramammary infections	Universidad de Caldas	Co-investigador
2016- Presente	Association between raw milk consumption and the colonization by <i>Streptococcus agalactiae</i> in people at risk in dairy herds from Caldas, Colombia	COLCIENCIAS y Universidad de Caldas (US\$220.000)	Investigador principal
2015- Presente	Use of infrared thermography as a diagnostic tool for subclinical mastitis in Holstein cows	Universidad Nacional de Colombia y Universidad de Caldas (US\$20,000)	Co-investigador
2015-2016	Validation of a platelet- and protein-enriched compound for the treatment of subclinical mastitis caused by Gram positive bacteria	COLCIENCIAS y Universidad de Caldas (US\$223,000)	Investigador principal
2015-2017	Serotyping of <i>Streptococcus agalactiae</i> isolations and risk factors for its presence in bulk tank milk samples from dairy herds in Triangulo del Café, Colombia	Universidad de Caldas (US\$4,000)	Co-investigador
2015-2017	Molecular characterization of <i>Streptococcus agalactiae</i> isolations from dairy herds in Caldas, Colombia	Universidad de Caldas (US\$16,250)	Co-investigador
2014-Present	Evaluation of livestock production systems in the basin of rivers Tapias and Tareas in Caldas, Colombia	Fondo Nacional de Regalías (US\$2.5 M)	Co-investigador
2013-2015	Implementing a milk quality laboratory in the region of Triángulo del Café, Colombia (COLCIENCIAS 0144-2013)	COLCIENCIAS y Universidad de Caldas (US\$260,000)	Investigador principal Investigator
2013-2015	Evaluation of the effectiveness of two	COLCIENCIAS y	Co-

	treatment protocols to control <i>Streptococcus agalactiae</i> mastitis in dairy herds of Antioquia and Caldas (COLCIENCIAS 0155-2013)	Universidad de Caldas (US\$205,000)	investigador
2012-2014	Systematic review and meta-analysis of the effect of selenium and vitamin E supplementation on udder health in cattle	Universidad de Caldas y Alltech Inc., Colombia (US\$5,000)	Investigador principal
2009-2011	Technology transfer to establish the prevalence and impacts of <i>Streptococcus agalactiae</i> in the Colombian dairy industry	XXIII World Veterinary Congress Foundation (US\$15,500)	Co-investigador
2007-2009	Evaluation of the nutritional balance of selenium in bulk tank milk from dairy herds in the south of Chile	COLUN-Chile (US\$8,000)	Investigador principal
2007-2009	Selenium supplements-transfer to milk and udder immunity in dairy cattle	Alltech Inc., USA (US\$23,000)	Co-investigador
2007-2009	Selenium status of Maritime dairy cows and its relationship to the incidence of new intramammary infections	UPEI-AVC, Canada (US\$10,000)	Co-investigador

REFERENCIAS PERSONALES

JEFF J WICHTEL BVSc, PhD, Dip. ACVT

Decano
Colegio Veterinario de Ontario
Guelph, ON, Canadá
E-mail: jwichtel@uoguelph.ca

HERMAN BARKEMA DVM, PhD

Jefe del Departamento de Producción y Salud Animal
University of Calgary
Phone: +1 (403) 220-2659
Cell phone: +1 (403) 826-9846
Calgary, AB, Canada.
E-mail: barkema@ucalgary.ca

ROBERTO A MATAMOROS DVM, MSc, PhD

Director de Postgrados
Universidad Santo Tomás

Av. Ejército 146, 6° piso, Torre A.
Santiago de Chile.
(+56 2) 2 362 47 95
E-mail: rmatamoros@ust.cl

JUAN CARLOS RODRIGUEZ-LECOMPTE DVM, MSc, PhD

Profesor Asociado
Departamento de Patobiología y Microbiología
University of Prince Edward Island
+1 (902) 566-0856
Charlottetown, PE, Canadá
E-mail: jrodriguez@upei.ca